CURRENT NOTES

Helping Atari Owners Through the World of Computing

Vol. 13, No. 2

March '93
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In this Issue:

Atari at N.A.M.M.
Waiting for the Falcon
A Darkroom on Your Desk
What Is the Information Age?
Universal SysOp Federation
New: STaying in Touch
New: STanding STill

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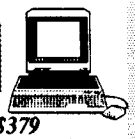

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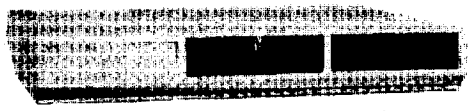

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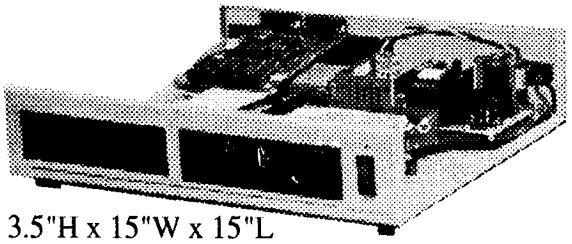

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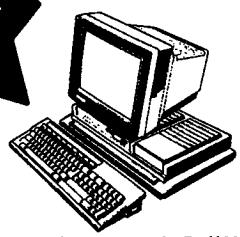

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Table of Contents
March 1993

REGULAR FEATURES

50 GEnie Notes, *by Lou Rocha*
Dateline Atari with Bob Brodie, Darlah's Treat, The Science Fiction RT (*by James Macdonald*), GEnie ST Libraries (*by Larry Duke*), Round Table Conferences (*by Brian Harvey*), Developer Spotlight-*Dorothy Brumleve*, User Spotlight-*Joey Sherman*

24 Junkyard Pussycat, *by John Barnes*
"What Is the Information Age?"
It is clear that we need to improve the tools we have for coping with a deluge of data; we also need to find the wisdom to use the data properly.

18 Myths and Mysteries, *by David Troy*
"Waiting for the Falcon-with Good Reason"
After a few words about his European visit, Dave explores some of the details beind the True Color mode on the Falcon.

28 Running Out of Ram, *by David Barkin*
"A Darkroom on Your Desk"
Have you ever wanted to manipulate your photos? Change reality? Dave gives a brief description of what photo manipulation is all about and discusses some Atari options.

54 ST Toolbox, *by J Andrzej Wrotniak*
"More on GDOS and Publisher 2 ST"
How to tweak your GDOS fonts for a better screen preview plus unrelated ravings on Gemulator and the new Cheap Mac.

22 Starting Block, *by Richard Gunter*
"Entering the PC Wars"
Richard chronicles three long days of trying to put his PC clone together.

47 STaying in Touch, *by Michael Mortill*
"You've Got the Whole World in Your Hands"
Using your telephone jack, computer keyboard, and a telecommunications program, you will find a whole world of new excitement, much of it on CompuServe!

14 Woods Music *by Gary Woods*
"Atari at N.A.M.M."
Gary takes us along as he "Does the Loop" at the Atari booth at the National Association of Music Merchants 1993 Show.

REVIEWS/ARTICLES

38 The Computer Geek *by Gordon Hooper*
An innocent trip to the computer store, then, before you know what is happening, your life can be turned upside down.

39 OmniWriter *Review by John Olbrich*
To get 80 columns on the Atari 8–bit, you need to make some changes inside your machine as well as find appropriate software.

42 PabQwk *Review by Bill Mims*
Off–line messaging can be made easy for your 8–bit Atari with this simple and easy program.

44 Universal SysOp Federation *by Dennis Rowsdale*
The USF is a group of dedicated BBS Sysops whose BBSs operate on the classic 8–bit computer and are linked together through the USF_Network.

46 Space Guns in the West *by Frank Sommers*
In an arcade in Boulder, CO, standing on a circular shiny black pod several feet off the ground, you can experience virtual reality.

58 Shadowlands *Review by Alfred Giovetti*
Like most role playing games, you face an evil bad guy, hoards of monsters, and worlds to save, but you are saddled with a high lethal and awkward task–intensive interface.

NEWS/ANNOUNCEMENTS

Editorial, *by Joe Waters* 4

Letters to the Editor 6
SPICE Help Needed – Steve Miller
Great Northwest Atari Show – J. Gerber
Atari ST/Deskjet 500 Fix – John Singleton
More Technical Articles, Please – Pete Potos
Gene Has Trouble with MS–DOS – Marion Kitchens
Useful Diagnostics Needed – Carl Irwin
Mini dBMAN Review – Ray Arthur
High Regard for Dave Troy – Donald Wilhelm
Thanks to CN/Authors – John Herz
What Can Atari Do For Me? – Craig Ritchie

STanding STill, *by Steve Kiepe* 10
The Secret of Success: Your Atari!
Atari computers are more productive than you might think. Our new ST editor introduces himself and offers suggestions on how users can contribute to Atari success.

8-Bit Tidbits, *by Rick Reaser* 34
One Year Anniversary: How Are We Doing So Far?

Atari Industry News and Announcements 60
SAC Expo: March 13–14
Toad to Market Silhouette Colortrace
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Gemulator, Version 2.1 Released
New KERMIT Communications Software for ST

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MOVING?

Don't forget to send in a change of address notice if you are moving. *Current Notes* is distributed via second class US mail. The post office does not forward second class publications; they throw them away.

The cover: In his travels, Dave Troy now has acquired three Falcons: a US, British, and German model. Can you see the differences? Photo by David Troy (c) 1993.

From the Editor's Desk

by Joe Waters

In the December/January issue I suggested we needed to cut back our costs and, given the limited options we had, scaling back the number of pages was about the only choice we had. That issue was 76 pages, eight less than usual. Some of you may have noticed that the February issue was back up to 84 pages. What happened? Well, since our printer uses 16–page sheets, any savings from using less paper was offset by other labor costs to assemble the additional odd–size sheet. So, we saved no money with the 76 page issue and, with plenty of material to report, I went ahead with 84 pages in February including several CN library page ads.

This month we are printing 68 pages; that should, finally, reduce our printing bill! As an added bonus, it also cuts down on the amount of work in getting the issue out. As it happens, I have had to do a bit of traveling in my daytime job, so the extra time afforded has been appreciated. Indeed, after we cross the last "t"and dot the last "i" for this March issue, I have to hop on a plane and fly off to Florida for a few days escaping this winter snow. (Hey, I didn't say the travel didn't have some fringe benefits!)

We have received some favorable responses from our February issue (see the Letters to the Editor this month). I trust readers will find this issue equally interesting. We welcome two new writers this month. *CN* has a new ST Editor, Steven Kiepe. As you will see, Steve is a "helo" pilot and his column, aptly named "STanding STill," will bring you the latest Atari–related news each month. I would also like to introduce Michael Mortilla. Mike, a professional composer of music for film, theatre, and modern dance, will focus his column, "STaying in Touch," on CompuServe. Both gentlemen are excellent writers and I think you will enjoy their contributions.

Meanwhile, Gary Woods tells us all about the latest happenings at "NAMM," and Dave Troy, just back from his European trip, now has three, count 'em, three, Falcons (US, British, and German). If you look closely at this month's cover picture, done by Dave, you may notice the slight keyboard differences. Dave starts the first of many forays into what the new Falcon has to offer. Andrzej continues explaining GDOS while Richard reveals some real problems in coping with DOS. Dave Barkin again wows us with his photo exploits and Rick Reaser celebrates his one year anniversary with CN.

Although our page count is down, there is still a lot more in this issue. Have fun browsing. I have to go pack for Florida now.

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Letters to the Editor

SPICE Help Needed

Dear Current Notes,

Please print this letter so that I may get a response from your readers. I am a 4th year Electrical/Electronic engincering student at Cal Poly San Luis Obispo. I am currently operating a TT030 with a few pieces of software, including *Circuit Maker* from MicroCode Engineering, *SPICE* from the *Current Notes* archives and *SubCal*, but the graphing capabilities were not up to what I need. I have had some problems using the *SPICE* program, mainly with the fact that most of the simulations I have run across have been written with *Pspice* in mind and I can't seem to correctly fix the simulation to run on my *SPICE*. Therefore, what I need is someone who is familiar enough with both programs to tell me what is going on. Also, if anyone knows about any other technical/mathematical programs out there that I might find useful in my field, i.e. programs along the lines of *MathCAD* etc., please drop me a line. Thank you!

Reach me via internet e-mail:
smiller@farad.elee.calploy.edu
or, the old fashioned way, U.S. mail:

Steve Miller
1474 Prefumo Canyon Rd
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Atari ST/Deskjet 500 Fix

Gentlemen:

In *Current Notes* Vol. 11, No.2, Page 42, March 1991, there was a review of the Deskjet 500 printer entitled "The Hewlet Packard Deskjet 500–The Latest of One of the Best" by Paul R. Pokorski.

In the article, he described a hardware fix to the problem of turning on the Atari ST before the Deskjet 500 printer. The ST will not recognize the printer unless the printer is turned on before the computer. He described a modification to the DB-25 connector by inserting a PNP transistor or diode on pin 1 with the black (anode) toward the ST and the other end on pin 1 of the DB-25. The information came from the GEnie Information Service.

The review was great, but I wish he had expanded on the diode fix. Could you contact Mr. Pokorski and have him send me a reprint of the text from GEnie with the type and value of the transistor or diode to use in this project.

I have enjoyed your magazine for years. I currently do not have a subscription, but purchase *Current Notes* from a local dealer that is still an authorized Atari service center.

John D. Singleton
Ooltewah, TN

Dear John,

I have talked to Paul and he will be sending you the information you requested. He has also been kind enough to forward the info to CN and we are reprinting it in this issue for the benefit of others who may want to perform the same fix themselves (see sidebar on next page.)

Joe Waters

Hi, Joe,

Attached is the file you requested; it wasn't that large, so I just rekeyed it. The originator of the information is Rob L. I don't know nor remember his last name. Also, the text file gives no clue as to which is pin #1. If you're looking at the cable from the computer end (as the computer would see it) with the wide part on the top, then the top left pin is #1. From the other, printer, end, the top right pin is #1. Also, needless to say, if the printer cable is a molded cable, one will probably have to purchase a new one. I hope this info is of some value to your readers.

Regards,
Paul Pokorski

More Technical Articles, Please

Dear Joe,

1. To add to J.D. Barnes review of Universal Network in the Dec./Jan. issue. We have used the MIDI connection at our office for about 8 months now. We use a TT and a Mega4 with Moniterm monitor. Of the applications we use: *PageStream, Word Perfect, Tracker ST, Touch-Up, Arabesque* and *Convector*, only *PageStream* and *Word Perfect* run properly. *Touch-Up* will run, but locks up when quitting the program. To use the other applications, we must remove the OSM program from the auto folder and reboot. Other than these setbacks, and the slow speed, we are quite happy with Universal Network.

2. Six months ago, I paid ISD a $300 deposit for Jim Allens 030/40 Tiny Turbo upgrade. I have called Jim numerous times and he gives me excuses as to production delays. I have read several articles about the product being sold at Atari shows. At this point I'd like to off the Mega and get another TT and Falcon. Can you help?

3. Love the magazine but would like to see more technical articles on the hardware available.

Sincerely,
Pete Potos
Chicago, IL

Gene Has Trouble with MS-DOS

Joe Waters,

Something for the Atari users of *Current Notes*. Enjoy!

Marion D. Kitchens

Gene has trouble with MS-DOS.
Many an evening is a total loss.
He sat right down to show who was boss.
All said 'n done, The Boss Was DOS.

DOS had said "Access Denied."
But the file was there, Gene had spied.
The darn machine had simply lied.
Poor Gene's brain was getting fried.

Lots of floppies in a great big pile,
Gene was trying to find a single file.
Lots of anguish and a heap o' bile,
Gene sat down, cried like a child.

DOS is trouble any way you try.
Error messages to make you sigh,
Fail, Abort, or another retry,
Enough to make a grown man cry.

A drive, B drive, and C drive, too,
None will do what you tell 'em to.
You know you checked it thru and thru,
But "Bad Command" DOS says to you.

A simple program he tried to install
Thought he'd have himself a ball.
Made a .BAT file he couldn't call.
Threw the darn thing against the Wall!

After all is said and done,
MS-DOS simply ain't much fun.
Many a program just won't run,
MS-DOS is a son of a gun.

Pack it up and give it the toss.
Forget all about MS-DOS.
If you don't, DOS'll be your boss,
And that'll be your biggest loss.

MS-DOS is like this verse.
Goes on and on, gets worse and worse.
Enough to make your noggin burst,
The computer world's biggest curse.
MDK Nov. 92

Useful Diagnostics Needed

Dear CN,

The article "Fragments and Dungeons" by Gunter in your September issue indicates that Beckemeyer has released a freeware version of the FAT analysis section of their *Hard Disk Sentry* software. Since this seems to be a very useful piece of diagnostic software, I hope you will be able to pick this up on one of your PD disks in the future. I would certianly like to obtain it when it becomes available.

If you need any further information or comment, please let me know. Thank you for your consideration and assistance.

Best Regards
Carl K. Irwin

[I will try to add that program to one of the new utility disks this month, which features a number of "FAT" utility programs. –JW]

Mini Review

Dear Joe,

I have been waiting in vain for a review of *dBMAN V 5.3*. I subscribe to several Atari specific magazines and can't understand why NONE of them has carried a review of this update. Usually, any major upgrade of a program is reviewed in ALL of them.

The following is a report of my experiences with this expensive update. I intend to send it to every Atari magazine

Deskjet / Deskjet+ / Atari ST Powerup Sequence Problem *SOLVED AGAIN!!*

I was interested in finding out how to solve the problem of printing to the Deskjet when it is powered up *after* my ST, when I ran across an article in *ST REPORT*, which described a method using a PNP transistor.

Well, to make a long story short, I *didn't have* a PNP transistor, and I started wondering: "Hey, what do you need a transistor for, if all you want to do is prevent a powered–off Deskjet from pulling down the STROBE line?" It didn't take long to figure out the answer, and *here it is*! Just use a DIODE! The part costs 10 cents or less, and you only have to solder 2 connections instead of three (I hate soldering–smoke messes up my contact lenses:–).

The Deskjet, when powered up, provides a 5v signal on pin 1. The ST likes to see that, because it has the *same* signal on its own pin 1 when it comes on. When the ST strobes that line, it grounds the line for a split second, taking *both* signals with it, then returning to 5v. But, when the Deskjet is turned OFF, its pin 1 no longer has the 5v signal, and as a matter of fact, it acts as a "2000 ohm to ground" load (or thereabouts) on pin 1. So, when the ST powers up (and the Deskjet is OFF), the 5v signal the ST puts on its pin 1 gets SHUNTED to ground (through the DJ's 2000 ohms), and the ST doesn't like that one bit, so it decides to screw up the printer port so you won't be able to print even when you DO finally turn on your Deskjet! *Well, the nerve of some computers!* :–)

Not to worry, we'll fix that problem for good. The diode mod is like this: The anode (positive end) of the diode, is marked by a black band (I know, black usually means negative, but diodes are strange :–) on the 1N914 small signal switching diode (a very common type). That black end should point *toward* the ST's pin 1, leaving the cathode pointing away –› to the Deskjet's pin 1. The easiest place to put this diode is inside the DB–25 connector at your ST's printer port (so you don't have to dig under your Deskjet to get to the Centronics connector).

1.) Unsolder the wire at pin 1 of the DB–25 connector.
2.) Clip the leads of the diode to about 1/4" on each side.
3.) Solder the BLACK end to the DB–25 pin 1.
4.) Solder the other end to the wire. –*That's it!*

[Be careful when re–assembling, so you don't short anything on the hood.]

The diode allows the ST's STROBE line to sink the current on the line when in use, but if the Deskjet is *not* turned on, it will present a *very high* impedance on its pin 1, so it will not load the ST's STROBE line and the ST won't get mad! You can turn on your printer when you're ready to print, and your ST will be able to send printer data as if the Deskjet had been on since bootup! Amazin'! Simply Amazin'!

Here's a simple diagram so you know roughly what the 1N914 diode looks like, and how to hook it up:

From DJ's Centronic's port »––==##== To ST's printer port » : Pin 1––Diode (1N914)––Pin 1

Happy Jetting!

Rob L.

on my subscription list in the hopes of saving other *dBMAN* users both money and problems. Although the updated version 5.3 has been out for a full year, there may be users who are still trying to decide whether or not to purchase it, as well as other Atari fans who may be considering purchasing the program.

Some Advice to dBMAN Users

dBMAN is a powerful database program and very versatile. I particularly like the fact that *dBMAN* programming is much easier to understand than any other program language that I know of because the commands are words which define what you want to do and not codes. Their REPORT WRITER program, which is included and touted as being very easy to use, however, has always been too complicated for me and I have never been able to get a desired report out of it. I have used *dBMAN* for several years, and about my only complaint was that the DELETE command was not accessible while in the BROWSE mode, which is the logical place to be using it. I feel that this was a serious defect. Furthermore, to UNDELETE an individual record, it was necessary to enter the EDIT mode and issue the command there. When version 5.3 was announced, I was happy to see that they had finally fixed the DELETE and UNDELETE problem. In that new version, it was possible to DELETE and UNDELETE in EDIT or BROWSE mode by entering CONTROL+V.

Version 5.3 carried a very high upgrade fee, nearly $50, but I finally ordered it. To my dismay, I found a card in my upgrade package announcing that VersaSoft wanted another $25 for limited support. With an upgrade fee so high, the very least they could do is support it. I feel that the level of support any business offers is a strong indication of their integrity. *WordPerfect* is a fine example of tops in support.

When I loaded the new version into my computer and ran it, my screen suddenly went black (reverse video). That's not what the manual showed. Far worse, when a command was entered, it took so long to execute that I at first thought the program must have bombed! I find it incredible that a new version of a program would result in such a great slow-down. Usually, later versions result in speed-ups, if anything.

The crowning blow came when I tried to pass printer control codes using the ESC command. This had worked fine in prior versions but would not work at all with version 5.3. Of course, I thought I must be doing something wrong and so I spent many hours trying to figure out why I couldn't get that function to operate. The new manual showed the ESC function operating exactly as it had in previous versions. Finally, I determined that it was NOT my fault and wrote a letter to VersaSoft detailing the problem and requesting their solution. They ignored that letter, no reply of any sort. How's that for product support?

I eventually gave up and reinstalled version 5.2. Now the program once again works at normal speed, with a white background and black characters, and I can tell my printer what to do. Of course, I forfeited the ability to DELETE or UNDELETE records while in the BROWSE mode but I just decided that was the lesser of the eviols. I still think *dBMAN* is a good program. But, NOT version 5.3! I suspect that they reconstructed *dBMAN* for other platforms and then issued it for Atari without checking to see if it would work properly with that computer. My advice is: if you have version 5.2, hang onto it. DO NOT upgrade to or purchase version 5.3.

Ray Arthur
San Jose, CA

[Thanks for the update, Ray. I confess that I have version 5.2 and haven't upgraded. Perhaps I'm lucky. Here's a little hint on the browse/delete business. I often go into browse mode and want to delete specific records. I simply pick one of the fields (preferably close to the left-hand side of the screen) and erase its contents. When I am done browsing, I then delete all records for which the chosen field is blank. All the "marked" records are instantly deleted. Perhaps you can utilize this little trick. –JW]

High Regard for Dave Troy

Dear Joe:

I just realized that my subscription is due for renewal, so here's my check for $27 for another year of *CN*.

I am pleased to renew, because I value *CN* as an outstanding Atari magazine and resource. *CN* and *ST Informer* are the two best ones, and the only two reliable ones, from my perspective.

I hope you can continue to stay in business. I know that it is a tough business to be in. If you need to raise your subscription rates, that's fine with me.

Thanks also to both David Troy and you for the article on high resolution video in the February issue. I totally agree with Dave Small. I have the highest regard for everything that I have seem coming forth from David Troy: both his articles and his business. Both are first class. I happen to be a senior engineer (chemical, not computer or electrical) in a consulting firm whose primary product is technical reports (technical, economic, and market assessments). I am writing reports almost all the time, and I know how difficult it is to write technically competent and well-written papers and reports. I find David Troy's articles to be of consistently high quality: technically, organizationally, grammatically, conceptually, and psychologically. His articles communicate very well. They are always of value to me; I always learn something from David Troy's articles. I am glad that he writes for *CN*.

I also hope that businesses like Toad Computers can stay in business as both regional and mail order operations. Toad and others like it help to keep other dealers with lower standards of excellence a bit more on their toes.

Sincerely,
Donald Wilhelm
Menlo Park, CA

Thanks to CN/Authors

Dear Joe,

I've enjoyed *CN* for years and want to express my appreciation for the work you do in assembling such a fine magazine. I subscribe, read, and otherwise browse through quite a few computer specific magazines and enjoy them all, but none is quite as consistently inter-

esting and informative as yours. *CN* manages to clarify without being overly simplistic and that's tough. In particular, I'm prompted to write by your February issue, which did a great job of explaining everything from high resolution video to halftone scanning to GDOS. Many thanks to you and your authors for a truly superior publication.

Sincerely,
Josh Herz
Rochester, NY

What Can Atari Do FOR ME?

Hello Joe Waters and Current Notes,

...I am not a programmer, but a user. It is only in the last two months that I have really started to use my computers again. I got out of using it just before *Antic* magazine fell. My job sucks up 60 hours a week year round. I was lucky to get your latest magazine at L.R.Data, 2676 E. Country Rd. "E", White Bear-Lake, MN 55110.

I must say they are some of the *Unfriendliest* people I have ever known. I need some *User Friendly* people around me. I like what I see when I look at the laptop my brother got. And I like what I see with *Windows 3.1* and what is available for it. Especially the card that can freeze a still of a tv program and store it on disk and later print it out on a laser printer. It was shown on a tv program called Computer Chronicles on January 1st, 1993.

I've seen the Apple computer commercial where there are two men fumbling through the manuals trying to make their computer do what they were told it could do, while the female secretary is buzzing around them showing them what she did on her Macintosh in just a few minutes. And all they could say is, "Well, we're trying to make it more productive; it can do all the things your computer can do!" And she said, "Well, then why isn't it doing it?"That is exactly what happened to me! I have competed in state chess tournaments and once I purchased a chess program titled *MyChess II*, by Datamost and David Kittinger. I was never able to find the patience to sit down and actually get one move made without going into a rage over the ridiculous complication of the *simple*-by-comparison game of chess!!

And it took me two months and 1,000 sheets of printer paper and trial and error to figure out how to make the printer do what I could have written out in free hand in one hour.

What I need is something that serves me instead of me serving it. I have absolutely no interest in going to such pains again. I know that this printer can do many fine things, but my mind just can't adjust to the endless rewriting of the world every five years. My interest is in more mundane things, apparently.

Well, I really identified with the article that you published in the Dec/Jan issue of your magazine on page 62 ("The User Comfortability Factor," by Mark Miller). The point you made about software being more important than hardware was great. And I can attest to it by saying this. I work at a place where we recycle computers and once we picked up a truck full from Honeywell and I asked them what was wrong with one particular system. They responded, "absolutely nothing!" It just didn't have any software. No one would write any for it. So, we hauled it off to be scrapped for its materials and it consisted of five huge printers and three monitors and three stations. *All of it torn to shreds* for lack of software. I almost got sick! I then remembered my Atari's at home and how many other poor and even less understanding people than me have purchased a computer only to be disillusioned by the complexities of its operation.

Well, I don't want to bore you, but I want to know if the new Atari Falcon030 or the TT030 are IBM compatible. I wish there was a magazine like the *Computer Chronicles* or perhaps your magazine that could deal with the simpler minds like mine that can play tournament chess, but can't figure out the incomprehensible software that some have written.

You really spoke to my heart when I read that article of yours.

I learned a great deal about how computers worked with my 8-bit Atari's and am glad to have had them. But time marches on; it's time for something better now. There are opportunities coming up with the tremendous improvements being made, and many more in the next five years I suppose!

What can the new Ataris do FOR ME, instead of ME FOR IT? I AM LISTENING!

Bye for now.

Craig Ritchie
Plymouth, MN

[Well, Craig, I hope Atari is reading *CN* regularly. Although you may feel uncomfortable with some of the software you have tried to tangle with on your 8-bit Atari's, you do, indeed, represent millions of people, *potential* customers, who see the world just as you do. Atari will have to answer the question of what their machines will do for you if they expect to tap a mass market.

As for IBM compatibility, the Falcon and the TT *are not* IBM compatible. There are promises of a third party product that will allow the Falcon to run IBM software, but, unlike the GEMULATOR, which allows IBM compatible computers to run ST software, no product is currently being marketed (indeed, no one as of this point, can go out and buy a Falcon either.) However, the price of PC clones is so low, that it is often easier to buy a whole PC rather than an emulator. That is the good news. The bad news is that it won't be easier to set up and run than the ST; see "Starting Block" this month. Once your computer is set up and linked to your printer, the PC word processing programs can be awesome. However, getting to that point can be a significant hurdle even for the experienced user. –JW]

Send your Letters to the Editor to:
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122 N. Johnson Rd
Sterling, VA 20164

For electronic mail, send your letters to JOE.WATERS on GEnie and 74005,1270 on CompuServe.

If you see the expression "9303<– RENEW NOW" on line one of your mailing label, then this issue is the last one in your current subscription. Renew now to be sure you don't miss any issues! Thank you very much for your support!

STanding STill

by Steve Klepe

The Secret of Success: *Your Atari!*

Welcome to my first column for *Current Notes.* I'm a little intimidated by the knowledge that most of the past and current writers for this magazine make up the elite of Atari developers and critics, but Joe Waters was slumming this past month and I jumped at the chance to share my views on the ST world with a captive audience.

Hello from a Helo Pilot

By way of introduction, let me fill you in on my background, and also that strange logo for this column that I liberated from some old public domain .IMG library. I make my living as a Navy helicopter pilot, or at least I used to until the government sent me back to school for a year to get a masters degree and settle my nerves. We helo pilots are a different group-usually out of control and expecting the worse. We aren't as glamourous as all of those jet jocks that Dave Small likes to talk about (My helo can do Mach 0.3 in a dive) but on the other hand, only supremely confident and talented pilots are allowed to be strapped into a machine that is constantly trying to fly apart, and glides like a brick. Parachutes are NOT optional equipment. STanding STill is what helo's do best (but it's more like putting $5.00 into the "magic fingers" coin dispenser of the bed at a sleazy hotel than not moving) and of course, a helo is great for landing in the parking lot of a gas station and asking directions when you get lost.

A title like "STanding STill" may seem appropriate for an Atari computer; some would argue that the ST has been in a static situation for years. Like a helo though, looks are deceiving. Since I've already started down this path, for analogy purposes I'm going to compare a DOS machine (the jet) with an Atari computer (the helo). If Dave Small can compare his stuff to an SR-71, I demand equal poetic license!

What can a jet do? It can go fast, drop bombs and shoot guns. What else? Not much, a few side missions including reconnaissance so that others can go fast, shoot guns and drop bombs. It's flashy, and it seems "sexy" to some; but the glamour is misleading. The DOS world is like that—it's fast (with the right computer) in many missions, but it can sure be obstinate if you want it to do something other than what it was designed for.

On the other hand, the helo a multi-mission platform. In the helo world, we can be offensive in anti-tank, anti-ship, and anti-sub roles (and a one on one dogfight between a fighter and a similarly equipped helo is a real eye opener), we can search for and rescue people, conduct aerial surveys, move cargo, and conduct a host of other missions. We even direct fighters around. Yes, we're kind of bulky, not as fast as our jet brethren, and we don't suck, squeeze, bang, and blow enough gas in an hour to power a small city for a few days. But we're multi-mission capable, and that's exactly what the Atari ST is. With built in Midi, a proven CPU, solid operating system in ROM, and designed for ease of use, the Atari ST used to be the system to measure all others by. With the advent of the Falcon, it will be again.

Now then, about my qualifications to write this column. I've been an Atari ST owner since 1985 when my wife told me to trade in my old Commodore 64 and buy this "pretty computer with the coordinated color case." It was a 520ST with TOS on disk but it was a great improvement over the DOS XT machines that were common at that time. I was already "computer literate" by then (I could turn it on), with a Navy provided Zenith 100 Intel 8088 based machine running "Z DOS." My ST was a vast improvement over that machine, and as software slowly became available, my preference became clear.

Over the years, I upgraded with new and used equipment, first with a Mega 2, then with an upgrade to 4MB, a hard drive, a Moniterm monitor, and, finally, a Turbo 25 accelerator and TOS 2.06. I edited a southern California user group newsletter for a few years, and was sysop on the user group's BBS. It's been an education, and in the process I've been fortunate enough to be "carried" by those more educated and gifted than myself. In the final analysis, though, I suppose the fact that I am both breathing and a volunteer, made *CN* decide to give me a chance.

Who Uses STs?

In my opinion, the ST's user base has separated into six catagories of users. These groupings consist of the *musicians* with their MIDI focus; the *home/general purpose user* who dabbles in a bit of everything; the *"hacker"* for whom *Atari* is the platform of choice in the quest to "expand the envelope"; the *developer* who has found a niche with Atari products and hence become a big fish in a small pond; the *"gamer"* whose fascination with the ST was oriented toward playing arcade quality games at home; and lastly, the

professional users, individuals who have found ways to use the ST to make themselves more productive and their business interests more profitable. While some users seemingly span several catagories of use, most ST owners will fall into one of these catagories.

Musicians have found a very viable product in the ST, but they constitute a "niche" market, not generating enough sales to guarantee the system's long term viability. Developers are a mixed category; without developers there would be no computer products; hence no user support. Yet developers seldom support a computer that doesn't first demonstrate significant sales potential. Gamers no longer provide sufficient support to keep a computer viable—the *Super Nintendo*, *Sega Genesis*, and *Jaguar* (?) home entertainment systems offer a more attractive option than a dedicated game use home computer system.

The Secret of Success

What then, are the proper markets for a computer company to concentrate on if it wants to succeed on a large scale? Only two catagories of users can make a computer company viable in other than a niche market: the professional user and the home/general purpose user.

I consider myself in the category of the professional user, which is one of the catagories that can really make or break a computer's existence. Professional users by themselves create a tremendous market for the computer industry-just look at the overwhelming preponderance of MS DOS machines. MS DOS systems found their market in the business world and then expanded into the home markets.

Home/general purpose users are also a viable support base for a computer-remember the tremendous success of the *Commodore 64*, once the world's largest selling computer. Similarly, *Apple Computer's Apple IIe* and *Macintosh* systems created an empire that focused initially on the home market and concurrently invaded the secondary school systems, only later infiltrating the business world.

Where am I going with this? It's obvious to even the most hard core Atarian that our computers could soon become orphaned as Atari's market share continues to drop. Much of our hope for Atari's future rests upon the capabilities of Atari products poised to enter the marketplace in (hopefully) the near future. All of the capability in the world will mean little unless Atari can make significant inroads into the mass market, primarily the home market. At a time when *Macintosh* is introducing five new models every six months and delivering within 60 days of announcement, Atari must make a concerted effort to demonstrate why paying thousands of dollars for an Atari computer is a fiscally responsible decision. And that is where we, the current user base, come in.

What We Have to Do

Some of the common criticisms of Atari management have been focused on a combination of lack of advertising, lack of product, and lack of foresight in manufacturer/dealership relations. We, the user base, have a financial stake in Atari products. Just look at your desk whereon sit hundreds to thousands of dollars of Atari and third party hardware and software. The value of those products, in real dollars, has dropped drastically (but not as bad as MS DOS XT and 80286 systems). What we have to do to protect our investment is to find better ways to use the hardware and software we already have, to make fiscally sound purchases in the future, and to "spread the word" to potential users.

As a professional user, I, like so many other business users, have walked the tightrope between the cliffs of Atari and those "other" systems. As recently as two weeks ago, I put my system up on the market, intending to leave Atari for the "brighter lights" of the Macintosh world. Blinded by the fears of "obsolescence" and the lure of "standardization," I was saved from falling only by the realization of what it would cost to get the same capability that I already have. I was staggered, not just by the financial impact, but also by the capability that I currently have, but overlooked.

Less than a month ago, I was required to "merge" the operating procedure and regulation manuals (300 pages each) for two different aircraft systems into a single, cohesive manual. At work, I generally use MS DOS equipped Intel 80386 machines that the government provides with *Wordperfect* to write our various manuals. In this case, even with all the bells and whistles of our well-equipped system, I chose my Atari. Why? I brought my old Mega ST4, hard drive, and Moniterm monitor to work, loaded *Wordperfect 4.1*, and opened both documents side by side. Then I just blocked and cut with the mouse, moved what I liked to the appropriate locations, and closed. In one afternoon I finished a job that several people had already expended a week's worth of effort on, using our DOS machines. My co-workers were stunned and the smirks disappeared.

Atari Productivity

Yes, we could have done the same work on DOS machines but at much greater cost and difficulty. Why? An MS DOS machine, with a 80386 chip at 33 MHZ, 80MB hard drive, 4MB of ram, and a 19-inch monochrome monitor (*Windows*, MS DOS, and mouse included) would run at least $2,400 through a cut rate outlet in *Computer Shopper*. *WordPerfect for Windows* would be another $289. On the other hand, I can buy a new TT and a 19-inch Atari monitor for around $2,100, and *Wordperfect 4.1* for $159. And if you really wanted to cut corners, you could buy a sys-

tem like mine (used) for around $1,300 and it's far from obsolete.

In addition to cost, have any of you used a DOS machine lately? Let me tell you, the "smooth" operating environment noted in Atari products is NOT approximated well in the world of *Windows*. There are lots of special "quirks" in DOS-based machines (including memory hogging or memory management problems) that are not seen in the world of Motorola 680xx machines.

On the other hand, for those of you familiar with Macintosh, when was the last time you had to "rebuild your desktop," repair a corrupted hard drive, reload your system, or wait for the hard drive intensive Macintosh system to catch up to you. Don't get me wrong, Macintosh computers are nice, but the Atari operating system is far smoother in function and execution than the Mac's.

Getting the Most from Your System

Enough evangelical rambling. My focus here is that we, as users, must ensure we are getting the maximum out of what we already have, and gripe about our systems only when warranted. I hate to think of how many people have not considered Atari because of the reputation WE HAVE contributed to. We are now on the verge of seeing the Falcon make its delivery debut at a price suitable for the home market. On its heels should be *AtariWorks*, an integrated software package long overdue to the ST world. Various professional oriented computer magazines such as BYTE have already spoken: the Falcon promises tremendous potential. What remains is for the user base to objectively examine the capabilities of the Falcon and follow-on products, and to keep pressure on Atari to ensure that they understand the needs of the marketplace. There is a chance here for Atari to regain many disenchanted users as well as to build a new user base. Let's hope that this time they succeed.

Coming Events

In future columns, I'm going to try to focus on how people make use of their ST's in the business world. I'll interview a businessman in California who runs a company that makes automatic recreational vehicle leveling systems with the aid of ST computers, including design, layout, machining, inventory, and accounting. I'm also in search of a company that uses the TT to run an electronic embroidery machine. Any Atari-based desktop publishers out there? If you have a professional, or novel use for your ST computers, please give us a call at *CN*. We'd love to share your story with the Atari world. As for me, now I have to go fax *PageStream* generated files to work using *ST FAX* and then compute my taxes using *MacInTax* on my *Spectre GCR* equipped ST. See you next month.

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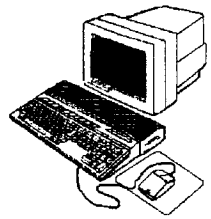

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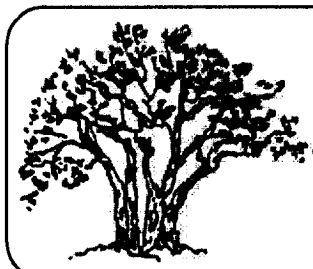


Woods Music

by

Gary Woods

Atari at NAMM

In the middle of January, I attended the NAMM Show (National Association of Music Merchants) in Anaheim. For those of you who haven't attended one of these extravaganzas it's the chance for all the companies that manufacture musical instruments or related products to show off their new wares. For a confirmed musical techno-dweeb like me, this is about as good as it gets.

Once again, Atari was the only computer manufacturer that had its own booth. It was located in a private room just off the convention floor, and product demonstrations were going on all day. I spoke briefly with James Grunke who said that the show was going very well for them, that dealer appointments were lined up three deep. Bill Rehbock was also in attendance, as well as the young Mr. Tramiel.

The booth was staffed by people from the local Atari user groups, with John Tarpinian of Glendale handling the primary information chores. He gave me a most amazing publication called Atari International TOS Software Catalog. It has a retail price of $12.00 and should be at your local dealers. In it are listings for Publishing and Graphics, Mutltimedia and Hypertext, Personal Productivity, Connectivity and Communications, Music, and on, and on, and on. The book is about an inch thick and could be a worthwhile purchase as a reference guide.

Doing the Loop

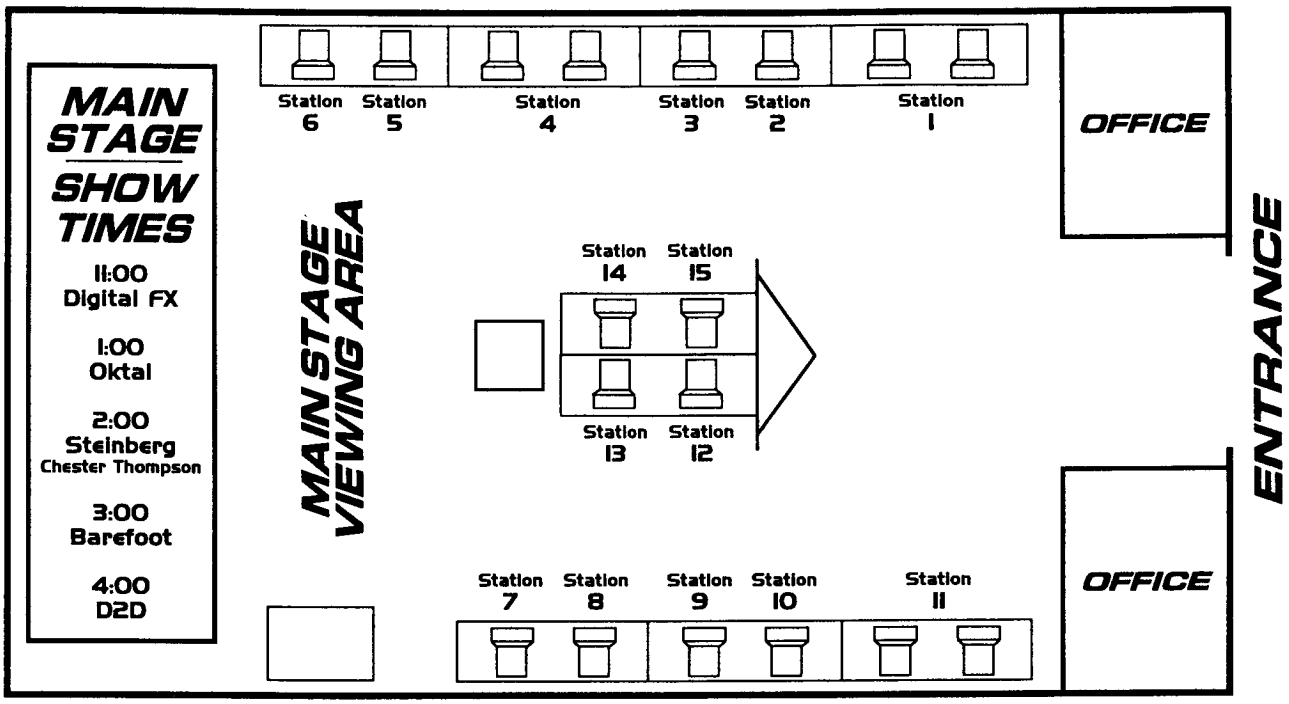
By the door of the booth there was a small brochure which said, "Atari Music invites you to Do the Loop." (See figure 1.) The object of the exercise was for the visitor to speak to each of the vendors on hand, get a signature and thereby get a chance to win a Falcon030. Well, since I was going to speak to these people anyway, and I am a notorious cheapskate, I pressed onward to fill out my card.

1. Singular Solutions. In the first area, Singular Solutions showed the *D2D Edit*. This is digital recording and editing software that works with their A/D64x hardware. The unit connects to the DSP port of the Falcon030 and provides two channels of 16-bit delta-sigma analog-to-digital conversion with 64 times oversampling and a three stage linear phase digital anti-alias filter. It also includes digital audio (AES/EBU and S/PDIF) inputs and outputs for connection to CD players, DAT recorders, and digital mixers. At $1,295 this might be a good way to get involved with digital audio on that new Falcon you're going to buy.

2. Chro-Magic Software. Next door were the nice folks from Chro-Magic Software Innovations. They focus on music education software such as *Guitaristics*. It was designed to help guitarists learn chords and scales in all keys and positions as well as give insight into the concepts of scale improvisation and chord substitution. Also, they demonstrated *Pianistics*, which is similar to *Guitaristics* but related specifically to the piano. Lastly, they had something called the *Pianistics Encyclopedia*. It includes all the features of *Pianistics* with the addition of something they call "Pattern Practice." This feature will assist in learning to play by allowing practice of any segment of a composition at any tempo desired. The prices for these products are $69 for *Guitaristics*, $79 for *Pianistics*, and $99 for *Pianistics Encyclopedia*.

3. Codehead Software. Pushing on to the next station I came across John Eidsvoog of Codehead. I can't say enough about the fine utilities that John and his partner Charles Johnson put out. They make my working environment a real joy, and have been a big reason that I have stayed with Atari. John demonstrated *MIDI Spy*, which can be run as an accessory or as a program. With this software MIDI data can be recorded at any time from the desktop or from within GEM or TOS programs, even if the dialog box is not open. Hot keys control the recording, which is always active, or you can activate it directly from your keyboard. The program can play a list of MIDI files in the background while the computer is used for other tasks like word processing, desktop publishing, or file maintenance. He'd gotten some MIDI files from a booth out on the main floor, and they played just fine, including program and volume changes. Retailing for $79.95, this program could make even a non-musician's working environment more fun.

4. Barefoot Software Inc. Next to John, Barefoot Software Inc. held court. This is one part of the company that resulted when Hybrid Arts split up. They showed the current version of their sequencer package, *SMPTE Track*, which is called *7.01 Platinum*. The other products in their catalog include *GenEdit 2.0*, *EZ Score+* , *Ludwig*, *HybriSwitch*, the *MidPlexer*, and the *SmpteMate*. Also, they announced an agreement with Singular Solutions to package a direct-to-disk re-



"DO THE LOOP" -- Collect the signatures from all 15 participating Atari developers

cording setup using Barefoot software along with the *D2D Edit* and *4T/FX*. No pricing information was available for the direct-to-disk project, but *Smpte Track Platinum* retails for $499.

5. **Goldleaf Publishing.** Next to Barefoot, Goldleaf Publishing had set up shop. They demonstrated *DA's Vektor* on the Falcon. They emphasized the mutli-media capabilities of the Falcon with its MIDI ports and 16-bit CD quality sound capabilities built in. Being at a music convention, they talked about designing band logos, CD Jackets and J-cards for cassettes, and then putting those designs into motion using their animation package. The program is able to sync images to music and then overlay your computer animations onto normal video images. They said that with any standard VGA or RGB computer monitor, you can achieve top notch animation for videos right from your desktop.

6. **Thinkware?** The next area was supposed to be Thinkware, but they were no where to be found. I was told they had a booth out on the main floor, but my real concern was who was I going to get to sign my card so I could win that Falcon? Pushing on, with a blank on my card, I passed in front of the "Main Stage Viewing Area." They had a 37" Mitsubishi monitor in the middle of the stage for demonstrations which showed off the programs to even those at the back of the room. All the demonstrations went well, with the highlight for me being Chester Thompson of Genesis working with Geoff Ryles conducting the Steinberg demo.

7. **Dr. T's Music.** On the other side of the stage, Dr. T's Music Software showed the *Omega II* version of their sequencer program. With their Multi Program Environment it is possible to load any eight programs simultaneously. Two of those programs are the *Tiger Graphic Note Editor* and *Graphic Song Editors*, which have excellent real-time capabilities even while locked to SMPTE. The new MIXmaster mixing module allows complete control over mixes using either external MIDI controlled mixers or MIDI volume. Another module is QuickScore, which allows for the printing of scores. All these features are included in the *Omega II* package, making it a complete working environment.

They also demonstrated the *X-OR* universal librarian program. With this software, patches or entire banks can be sent or received from any supported instrument. All instruments are always on line, with one mouse click instantly selecting any of them. Once the information is loaded, a large variety of bank editing commands and options are available to manipulate the sounds. A helpful feature is a MIDI File Player that allows the user to play sequences while editing the instrument sounds. The whole setup can be saved with one command, including MIDI patch bay switching. This is a very impressive package that can bring all the elements of your studio together.

8. Compo Software. Next to Dr. T's Music Software, Compo Software demonstrated *Musicom*. It is a software package, specifically for the Falcon, which utilizes the DSP and sampling capabilities. Some of the manipulations possible are Digital Delay, in which you can set time, frequency, and output level. Graphic Equalization with ten bands of equalization available on both the right and left channels, and something they call an Automatic Smooth Function. Also, there is a Harmonizer which adds multiple voices to the original recording. With this feature, volume as well as intervals for each channel can be adjusted separately. My favorite feature is Karaoke. This allows for the removal of the vocals from most recordings, so that you can sing along with the original band accompaniment. For a retail price of $69.95 this is a great piece of software.

9. MGI. Next to Compo Software, MGI of Germany demonstrated the *Guitar Library*, *Scale Master*, and *Guitar Trainer*. Included in the library, are scales, modes, arpeggios, polychords, and fingerings. The *Scale Master* is billed as a guitar sequencer and fretboard trainer. It has easy play-along songs, shows how to change grooves, including odd meters, and gives some memory training. The *Guitar Trainer* uses actual sampled guitar sounds to help learn how to play. Included is a Notebook, which loads automatically, to keep a list of progress. Also, exercises can be added to the ones already programmed so that you can work on specific pieces. All exercises are played on an animated keyboard to be followed by the student. I couldn't get a price, but I'm sure this package is very reasonable.

10. Tran Tracks. Next, instead of Gadgets by Small, a company called Tran Tracks showed a product which turns the ST into a "Laptop MIDIFile playback system." With this piece of hardware, MIDI files can be played without a monitor. The software portion of this device organizes songs into banks of eight. Each of the banks is given a variety of performance parameters that include Autoplay, Autoload, and Assignable MIDI Thru and Remote Control. Listed at $129 it could be useful for audio video presentations. Also, they showed something called *16+* which adds another 16 MIDI channels to your setup. The literature said it was compatible with *Cubase*, and *Notator*, so for $50 it could be a good investment. To play on their small sequencer, they had an impressive list of songs which are already arranged in a General MIDI format, and ready to sort in any order needed. The songs went for about $15 apiece, so this might be an inexpensive way to liven up your next sales demo.

11. Hotz Technologies. In the final area on the left wall was Jimmy Hotz showing his Hotz Box and the Hotz MIDI Translator. The *Hotz Software* contains all the musical Chord and Scale structures that exist, and allows shifting of the musical structures in a transparent and virtually instantaneous manner. In the case of writing or multi-track recording, the writer or arranger plays through the changes of the song, the Hotz Box Software captures the output with a MIDI sequencer, and then when it is played back all the Chords and Scales have been shifted automatically. The instrument itself is capable of translating key depressions into any MIDI controller command desired, and undoubtedly could be the subject for a whole article in itself. This is truly a unique view of music and the way it is performed.

12. Digital FX. In the center section Digital Master EX showed their Direct-to-Hard Disk 4 channel-16 Track Audio Recorder and Editor. It has nondestructive editing, variable speed playback and record, SMPTE synchronization with chase-lock, 4 independent digital and analog inputs and outputs, true graphic waveform editing, and DAT backup. The complete system contains three single-space rack modules, made up of two electronically balanced analog modules and one 2 channel digital module with 4 discreet coaxial digital inputs and outputs. At $4,995 it looks like a completely professional package.

13. Oktal. Next to Digital EX, Oktal from Canada displayed their sequencer package called *Multitude Pro*. I have seen their products at other shows, but this time it looks like they've really got it right. The sequencer has up to 256 tracks, and up to 16 ghost tracks. 80 MIDI channels are supported, with extensive MIDI thru and recording filters. Multi-channel recording is possible, and there is a cycle mode in the sequencer, which can be implemented at any part of the song. There is independent MIDI remote for each track, and a Jumbo Chronometer option, which would be great for working with video. At $295 it is a very affordable full feature sequencer that should be given a look.

14. Steinberg/Jones. On the other side of the desk, the people from Steinberg/Jones had *Cubase* running. This is the sequencer I'm currently using, and I find it to be the most inherently musical piece of software I've ever encountered. I'm going to be going more in depth about *Cubase* in later columns so for now, I recommend that if you're in the market for a sequencer you should definitely give it a look.

15. Yamaha. The last booth was supposed to be Yamaha, but there was no one to demonstrate the lone piece of hardware. It was the CBX-D5, which is their Direct-to-Disk system. So, because I was going there anyway, I proceeded to the huge Yamaha booth and got a demo. The features that I saw on no one else's system were the addition of two DSP chips, which are like having an SPX-1000 built-in to the device, and MIDI ports. At $2,995 this represents significant value and should be looked at if you're think of doing any hard disk recording.

No Notator. The one notable no show at the Atari booth was *Notator.* You might be aware that they are going through some changes and will be reemerging under the name *E-Magic*, which is part of Ensoniq. Traditionally, Ensoniq has not chosen to participate in these shows, saying they had enough distributors. I hope this new arrangement works out, because it is a fine piece of software.

Well there you have it, as much NAMM as I could shove into two days of ear splitting, eye popping excitement. By the way I haven't received word of whether I won the Falcon or not, but I think my luck is changing, I just got a letter from Ed McMahon telling me I may have won $10,000,000. If you would like me to write something more about a specific product, or have any ideas for future columns, please don't hesitate to contact me at:

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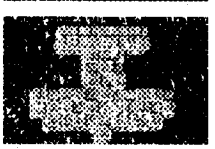

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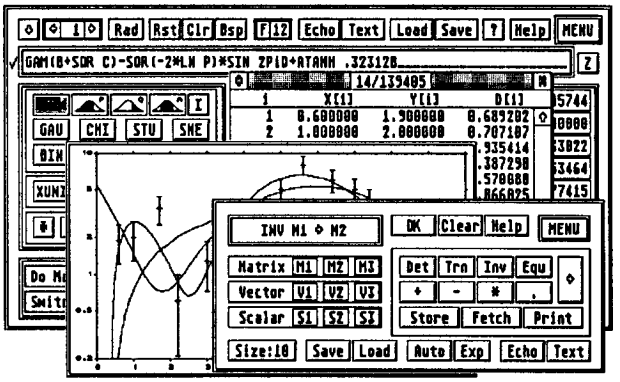

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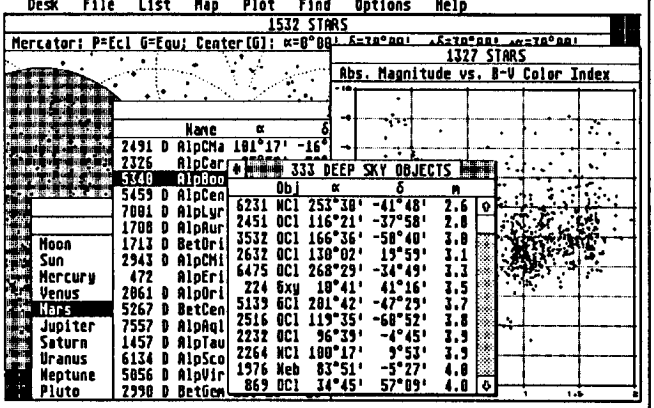

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Waiting for the Falcon-with Good Reason

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Hello

For the past couple of months my columns have dealt with rather complex specific subjects--flopticals and high resolution video to be precise. This month, I don't have anything quite so epic to discuss, so we'll just kick back and "jam" about whatever seems appropriate. Who knows? We might even cover something useful!

England

If any of you are interested in going to Europe, winter is the time to do it. In the summer, it will cost you upwards of $800 for a round trip ticket from the Washington area.

I flew to London last month (late January) for $260 round trip. You could go to Paris or Frankfurt for the same price, but I had business in England. And on average, England has the same weather in January that it does in July. It's about 50 degrees, kind of cold and kind of damp--and don't forget grey!

So if you're going to get treated to England's miserable weather no matter when you go, why not pay $500 less? And heck, 50 degrees is a lot warmer than the 20-30 degree highs you'll frequently get in a typical Maryland January.

I went to England to meet up with some Atari developers and resellers. Nothing too exciting--mostly we just talked turkey with folks who are facing the same dilemma that the US market is facing right now: Pre-Falcon Doldrums.

Waiting for the Falcon

The past 9-10 months have been weird for Atari folks everywhere. At this point, the remaining crowd seems to be made up primarily of the believers (people who would be making 16-color low-res Cyber animations of the Fuji symbol returning on judgment day to deliver Tramiellian retribution to all clone users, three years after Atari was sold off piece by piece at auction) and the folks who don't have anything to lose. And believe me, this leaves us with a very unusual cross-section of society.

In the United States the market has been small enough for long enough that the only remaining developers and vendors are those who are really smart and persistent business people. The rest have been weeded out by natural selection.

Because of the very fact that these developers and vendors are good business people, almost all of them have developed "Atari Escape Routes" which can be executed at any time in the event of an Atari emergency. I am always hearing about another developer who is looking into Silicon Graphics systems or developing for Windows, or Macintosh or some other platform.

Don't worry about these folks necessarily bailing out though. Some developers, like Abu Zubair, have gone on to make products for other platforms but are thus enabled to continue their support of the Atari platform. He makes most of his money selling RAM boards for workstations now, but his Atari roots remain; Zubair recently completed a really clean 14MB RAM board for the Falcon. It looks really nice.

So as a rule, almost every Atari developer and vendor has "a backup plan" in case the Atari market is beyond the point of no return. But in general, almost all of the remaining developers and vendors are willing to continue their support of the Atari platform, even if it means executing their backup plan as well. In addition to the remaining developer and vendor community being decent business people, they are also very dedicated to the ultimate success of Atari and, now, the Falcon.

This is a good mix of traits. Dedication without horse-sense will get you nowhere. Horse-sense without dedication will take you straight to the PC platform. Dedication with horse-sense will allow for the creative development of the Atari platform, and may even help subsidize and expand it. If some of these developers are able to generate significant capital by working on products for other platforms, it will allow them to invest in developments for their favorite computer.

It might seem like wishful thinking to expect developers to redirect capital generated from other endeavors into the Atari platform. Would that not be throwing good money after bad? The Falcon actually offers untapped potential. The Falcon's DSP and system-wide high bandwidth allow for unheard of applications regarding sound, graphics, and more. But these applications can't be explored without money.

An insightful developer will see that spending money on Falcon developments may actually pay higher dividends than spending money on a PC or Mac based development. Consider the gamble: if you create a revolutionary product on the Falcon using the DSP, you will have virtually no competition and will be insured of a decent reward, not to mention ego-gratification, by becoming an instant celebrity in the very, very small Atari developer community.

If you create a revolutionary product on the PC or Mac (which is a much, much harder thing to do, given that the systems are less dynamic than the Falcon and that more things have been tried), you'll be faced with instant competition, marketing nightmares, and huge capital outlay in advertising and upgrade development. Not to mention that there is no ego-stroking in the DOS world. Bill Gates manages to take the credit for everything that runs under DOS or Windows.

Of course, we've locked ourselves into a bit of a box here—if it's not sensible to invest money in developments for other platforms, then why and how can you deviate from the Atari platform in the first place? Well, developers would have to consider becoming what I'll call a "PC parasite." Become a blood-sucking leech on the belly of the compatible.

That is, developers might consider making a small, specialized utility, or accepting a contract to write code for a major software developer who could use a bit of expertise in a particular area. Or perhaps they would consider developing a software program and then selling the code to another company that would want to include it with their hardware. In short, it is a fact that it is no small task to become a real "developer" on a PC or Mac platform. Most application programs are written by huge software development houses. It is going to be a big, long, hairy, draining deal if a one-guy development team tries to make a complete "application" for a PC. Consider trying to assure compatibility with the vast array of video cards and other system enhancements for PC's. It would be a heck of a lot of work.

Therefore, if developers can convert a small, specialized piece of their expertise into an appreciable hunk of cash, that's good for Falcon development.

So, all remaining developers and vendors in this country are either devising, or have in place already, escape routes and plans to augment declining income. This is reasonable, and should not be seen as anything to reflect negatively on the future of Atari. It is, rather, a testimony to the good business sense of these developers and it shows that they are dedicated enough to the Atari platform that they want to be around when it may flourish.

England's Blues

The best thing about England is the beer. I went with a friend of mine who's from the Washington area but lived in Oxford for about six months of last year. He made all the beer mistakes for me already, so I was treated to some of England's finest. Better than the excellent draft Guinness and the typical lagers is the bitter. It's a relatively flat, relatively low-alcohol beer that is, at its best, as smooth as can be. It's served cool, just slightly below room temperature. It's full of impurities and triple sugars. It's the only beer that drinks like a meal.

So, tinted with amber colored glasses, my friend and I tried to get a glimpse of the UK Atari market. We also formulated a theory about American beer--it was homogenized by prohibition. Most of the independent breweries in the U.S. were squashed, and when it was repealed, the "megabreweries" amassed huge sums of capital very quickly and squelched their competition. Any ideas?

Things are similar there, but they are not quite in the advanced decay the way they are here. Developers and vendors are just starting to become worried, and Darwin's cleansing is just starting to hit. The Atari market is probably five times bigger in England alone than it is in the United States, although you'll hear folks scoff that Atari machines are not seen in the stores very frequently, etc. (Note, though, that England's Radio Shack stores carry the Atari 520STE.) England's Atari market, as it is here, is almost entirely based on mail order—especially when it comes to hardware. Software can be found a little more readily at local stores (and at the Virgin Games Megastore in London), but as that store's name implies, the software is primarily entertainment software.

You may have guessed that things are not all bad for the Atari market in England anyway, because of the fact that that is where most (98%) of all Atari games come from now. The productivity market is definitely second to games there.

I feel like if the Falcon is given eternal life, it will be given to it by developers in England and Germany. As the "decay" is not so far along there, there is more money and there are more people still involved with the platform.

We definitely talked to several developers who are excited about upcoming Falcon products. I would tell y'all if I could, but I'm under nondisclosure. But all of them are filled with great hope and some skepticism of the Falcon. And all concur that this time of "waiting for the Falcon" has been one of the most stressful periods they can recall!

When I was there, I heard pretty definite words that the UK Atari distributor would be receiving 200 Falcons that week. (They were standard 1040-case type Falcons, nothing unusual in different cases.) So perhaps the waiting is almost over for them. (Who knows? By the time you read this, the waiting may be over for us as well! It's really rather likely!) Thanks to the kindness of a friend over there (and the check I

wrote him), I ended up bringing home a Falcon for myself. And it's really, really cool.

Fun with Falcon

The Falcon is one nifty machine. I have been spending a lot of time exploring its sound and graphics capabilities. Speaking of graphics capabilities, I wanted to quickly go over a couple of points I made in the last issue about video on the Falcon.

I made the point that the True Color mode on the Falcon was really a 15-bit mode, not a 16-bit mode. I am still somewhat confused on this, but according to the information that I now have, it seems that there is both a 15 and a 16 bit true color mode.

The first thing that should confuse you about this is that if each pixel is defined in terms of a red component, a green component, and a blue component, you'd expect that you would give each color equal weight in its ability to vary.

24-bit color makes sense. Each pixel is defined in terms of 3 bytes, like this:

R R R R R R R R G G G G G G G G B B B B B B B B

That's cool—you've got an equal number of bits for red, green, and blue.

What's 16 divided by 3? Last time I checked it was five and a third. Daddy, what's a third of a bit?

To sleep perchance to think of foolish things like this—aye there's the rub! Obviously, Atari can't give a third of a bit to each color, so they arbitrarily decide that green is more deserving of a bit than red or blue. So in the 16-bit true color mode on the Falcon, each pixel looks like this:

R R R R R G G G G G G B B B B B

This means that each pixel is the sum of:

1 of 32 variations of Red
1 of 64 variations of Green
1 of 32 variations of Blue

And it is true that these variations allow for 65,536 different colors!

I was correct in pointing out that there is an "overlay mode" on the Falcon where the color is reduced to 15-bit, and 1 bit (the extra green bit) is used to determine whether that pixel is used by an alternative video source.

For instance, you could create a true color screen where the left half of the screen was computer graphics and the right half was supplied by your video camera. You'd have to be in the 15-bit true color mode, and the pixels on the left half of the screen would look like:

R R R R R G G G G G G B B B B B

The pixels on the right half of the screen would look like:

X X X X X X X X X X X X X X X X

And there's no reason why they'd have to be grouped together. Make every other pixel a "video" pixel, and blend your computer graphics equally with your video input. Whatever. It gives you a lot of control.

So while there does appear to be a true 16-bit video mode, it's not usable with genlock and, due to the third-of-a-bit discrepancy, is somewhat biased towards the green component.

Recall that the True Color mode has no palette. Each pixel is "absolute" and made up from its component color bits. In True Color mode, the number of colors displayable on-screen is 65,536. The number of colors available is also 65,536.

Palette Based Modes

All other ST and Falcon graphics are palette based, and should not be confused with the ideas behind 15, 16 and 24 bit true color modes.

The ST's palette is 512 colors (or 8 variations of red, green, and blue). The STE's palette is 4096 colors (or 16 variations of red, green, and blue.) The Falcon's palette is 262,144 colors, or 64 variations of red, green, and blue.

The trade-off for having 262,144 colors is that you can only display 256 of them at once. The palette based video modes maintain color registers (anywhere from 2 to 256 of them) which can be modified to be any of the possible palette colors. You're familiar with this concept already—the Atari control panel does exactly this.

When the computer wants to draw something on the screen, it draws it in one of the available "colors." If you then were to go into the control panel and tweak that color register, you'd find that the color of that object would change as well. You've all seen this--just try modifying the background color register on your desktop.

So in a palette based mode, rather than using the data in each pixel to "create" a color on the fly, the data in each pixel is used to access a color table which tells the computer what color to create for that pixel.

That's how you can get away with having a 4-bit color mode and still have 262,144 possible colors. If you were to try to create a 4-bit true color mode you might have:

1 bit for Red, for a total of 2 possible values of Red
2 bits for Green, for a total of 4 possible values of Green
1 bit for Blue, for a total of 2 possible values of Blue

This would give you 16 colors all right, but they'd be mighty boring colors. (I gave green the extra bit for poetic justice). So, rather than have a 4-bit true color mode, we do the palette based thing. It makes a lot more sense.

Anyway, just understand that the True Color mode is not palette based and is somewhat revolutionary on an Atari.

Also, one final clarification about Falcon resolutions. On a VGA monitor, the maximum standard Falcon resolution is 640 x 480. On a TV or SC1224, the maximum standard resolution is 640 x 400. On a TV or SC1224, applications can select an "overscan" mode though and create an effective resolution of 768 x 576. You can't do overscanning on a VGA monitor (although it will emulate it by giving you a 640 x 480 window onto the 768 x 576 plane), and you also can't select overscan mode from the desktop. An application must be Falcon-aware to take advantage of overscan.

Sound

The other big feature of the Falcon is its sound capability. It has three separate sound systems. There's the old Yamaha sound chip, the STE type DMA sound, and the new DSP-based sound system. I've been lucky enough to be playing around with three programs that all use the DSP to do exciting sound.

There's *Audio Fun Machine* from Atari, which will add special effects to audio input in real-time. This is very cool. You can plug your CD player into the microphone jack on the back of the machine (after, of course, attenuating it to a mic level), and play music through the computer in real-time, giving it "surround sound," or a delay effect, or a flanging effect—even use it as a graphic equalizer. We use this to impress people at the store.

There's *System Audio Manager*, which is pretty much completely mindless but fun just the same. You can record digital sound samples (which can be as long as your RAM can support) and play them back at your command, or assign them to specific system events like bombs, windows opening or closing, file selectors, system startup, the system bell, etc. You've probably all heard about this program or have seen similar things on other computers, (i.e. *SoundMaster* on Mac/GCR).

Lastly, and probably my favorite software gadget for the Falcon thus far, is *Musicom*—soon to be released by Compo Software and similar in idea to the D2D direct-to-disk recording program which will be bundled with the Falcon.

Musicom will let you record directly onto a hard disk in 16-bit stereo at 49.1 kHz. Bear in mind that compact discs run only at 44.1 kHz, which means that the highest frequency sound you can reproduce on a CD is 22.05 kHz—pretty darn high up there. Well, with a Falcon, you can reach up to 24.55 kHz. That's way up there. Effectively, the Falcon's sound quality is 111% better than a CD. And you recall that folks said that the CD was the "ultimate" in sound quality.

With *Musicom*, I was able to record a three and a half minute song using just a 4MB Falcon. This may not seem like such a big deal, but at this quality, a song like that takes up about 45 megabytes! This would not be possible using previous Atari hardware. You could only sample into RAM, and not onto disk. Not without thousands of dollars worth of equipment, that is!

I will be presumptuous enough to wager that a 1MB Falcon could do the same thing. Essentially, the DSP chip is programmed to digitize data while the computer does other stuff, like busily copy the data from RAM to disk. Wow, what a concept!

Ideally, you'd like for some realtime compression to take place as this stuff is digitized. 45 megabytes is kind of a lot for just a 3-minute song. I used a blank 120MB hard drive to record 4 songs! Whoa! But that kind of thing is possible and coming.

For musicians, the Falcon is nothing less than a call to revolution. Consider that with a 1MB Falcon for $700-$800, a $69 program like *Musicom* or a free one like D2D, and a $2,000 one gigabyte hard drive, you can replace a lot of very expensive digital mastering equipment. The fact that the Falcon has MIDI capability and multi-track recording capability is like icing on the cake!

So, from a Falcon system for under $3,000, you can actually CREATE compact discs! The system that Kodak uses to create photo-CD's is down into the well-under $10,000 range, and it can also be used to create audio CD's on a one-by-one basis. This is putting power into the hands of people who are not used to having it. Big studios typically maintain the lock on this type of equipment because of the huge capital outlay, and so control the creation of music by getting to choose what gets recorded and distributed.

The Falcon has the potential to screw up a lot of studios by taking the editorial control and business away from them! And you can bet that the Falcon certainly is capable of creating thousands of recording studios, not to mention putting others out of business!

More Next Time

By next issue, I will have had more time to play around with some of the Falcon's features and I hope to bring you more exciting news!

In the meantime, if anyone has any questions about the Falcon, please ask. It's really exciting! Until then...

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STARTING BLOCK

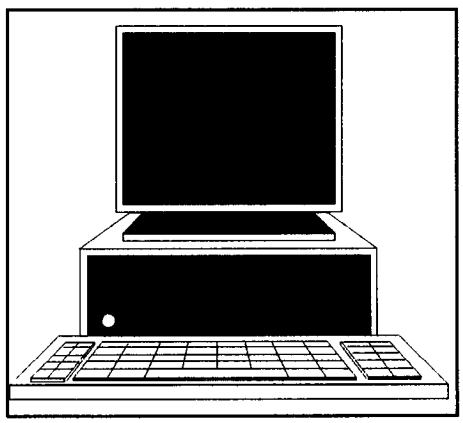
by

Richard Gunter

Entering the "PC" Wars

What with recent increased activity in the Atari user community's second favorite sport (second-guessing the folks in Sunnyvale), I thought it might be amusing to ponder how bad things could be, and are for most users of personal computers. I offer my experience with the latest computer at Pandemonium Palace, one of those Intel-based IBM clones, AKA a "PC." This column chronicles three long days which began with taking delivery—three days during which your humble servant developed a massive headache.

Don't get the wrong idea; I'm not abandoning my trusty old Mega ST. This latest acquisition was prompted by professional necessity. During the last several months I have been getting deeper into that side of things, working with OS/2, networking, *Lotus Notes*, and with some in-house training we've been doing at the office. I've even been seen to remove a cov-er and fiddle timorously with a cable—a remarkable step for one who tends to pick up soldering irons by the wrong end.



Anatomy of the Beast

A few words about the new toy's configuration might be in order. It contains an 80486 DX processor running at 33 MHz, eight MB of RAM, hard drive, Super VGA monitor, tape backup unit, and a quarter ton of business software intended to approximate the products used at my office and several of our client sites. The system's software is MS-DOS and *Windows 3.1* (natch). I also bought *OS/2 Version 2.0* and ordered the latest beta version of the latter on CD. (I don't have a CD-ROM drive yet). The major applications software is the *MS Office* and *MS Project*. If you keep track of such things, you already know that a hefty share of the price was for the software.

The total cost was only slightly higher than my original Mega system purchase, but the two situations don't compare well. The "PC" has no modem or communications software, no DTP software, and no printer. The Mega did.

By the way, that OS/2 beta was too good a deal to pass up. IBM offers it for $15, and it contains a ton of stuff. CD is getting hot, people.

Getting Home

Resident offspring were lined up at the door with their shiny new IBMish games in hand when I brought the clone home. They were, however, quickly informed that the principal use of this thing is for training. *MY* training. In that connection, I'd told the dealer not to install all the software because it would be a waste of his time; my intention was to start from scratch. Thank heavens he installed MS-DOS and *Windows* anyway, just to make sure all was well. I saved some of those files and cribbed from them several times.

Installing the software was enough to prompt formulation of Gunter's 1st PC Rule:

NOTHING IS EASY.

For new IBM-compatible (hereafter I'll simply say PC like the rest of the world) users, Nothing is Easy. Everything is an add-on big-deal choice: video cards, motherboards, RAM, keyboard, mouse, monitor, etc. and so forth. What makes this a big deal is that some hardware combinations won't play together well. Some don't work at all, and some will conflict with your software. A good dealer can save you a lot of grief by packaging a system containing components that don't interfere with each other.

"Drop back and try again" became a standard practice in this exercise. The tape backup unit is wonderful; it allowed me to make backups at each major stage of installation, saving me a lot of grief. My situation was more complicated than many because I wanted a so-called "dual boot" system, which allows me to start either operating system.

Starting with DOS

I elected to start with the DOS installation, since I wasn't entirely sure how much disk space would be consumed by the *Windows* etc. business. I also cheated; from experience at work, I knew that the DOS install program isn't very bright. If installed after OS/2, it blocks the Boot Manager from running. Moreover, the Boot Manager is an OS/2 item, so I had to use the OS/2 install package to establish the (un-

named) Boot Manager partition and three others--C: for DOS, D: for OS/2, and E: for everything else. All I did at this point was map the partitions; the install program should do a high-level format of drive C:. (I didn't know there are two sorts of format, did you)?

Oops. DOS won't install until the other partitions are formatted, whether you mean to use them or not. I should have left everything as free space (unavailable). Ok, format D: and E: and the install works. Sure enough, DOS starts. Already I'm starting to mumble to myself, but we're on a roll.

Hmmm. Seems there's a disk in the mouse package: the mouse driver installation disk. INSTALL a mouse driver? Install a MOUSE driver? Gimme a break! Oh well, I bowed to the inevitable. Now the mouse works. Whoopee. Be still my heart.

Opening a Window

Windows appeared to be the next logical installation, since most of the other software required it. Straightforward, no problem.

Drive C: seemed to have enough available for the applications, so they came next. Whatever you think of Microsoft, they do a good job of making installation easy for the user. *MS Office* has a single setup disk, which allows you to install the whole suite of programs with minimal hassle. Kudos for that. *MS Project* is just as easy. (I hope. I haven't tried to use it yet).

By now, drive C: is pretty full. OK, we'll dump it to tape and repartition the drive, then reload and proceed to the OS/2 installation, right? Wrong!

It seems that *Windows* has a swap file, used to provide virtual memory support for task switching. For some reason, its install program allocated that file (over 20MB) on drive D: as a "hidden" file. Naturally, I didn't know it was there, being as how it was hidden (thanks), so I'd erased it when I reformatted.

Windows was most unhappy that I'd made its swap file go away. Grrr. Back to the manual for hints on how to fix that problem. Of course, I had to repartition (again) to make room for the silly thing, since I didn't want it intruding on OS/2 space.

The Intel Memory Legacy

The early PCs suffered from infamous memory limitation problems (640KB available), and subsequent generations attempted to solve this problem by add-on boards and other means. Software had to be coded to take advantage of these memory expansions, and the techniques were different for the two most common approaches.

We're still saddled with concerns over "conventional" memory, "expanded" memory, and "extended" memory, even though the latest chips lack some of the early restrictions. The result is that you need a memory manager to coordinate, especially with earlier software. Sigh. Back to the store for a memory manager. I installed this beast, but am still unsure whether I've done everything properly. The documentation is extensive, but rather technical, requiring you to know quite a bit about how memory is used in PCs to optimize it.

OS/2 Installed

At last, I was able to install OS/2 (15 disks) and its bug fix package (14 disks). I won't dwell on this process, because most of you don't care, and because I've done it so many times lately that I can do it in my sleep. OS/2 is still, shall we say, a somewhat fragile system...

BAT 'n SYS

Each stage of installation (except for OS/2) altered two crucial files: AUTOEXEC.BAT and CONFIG.SYS. These are ASCII files that reside on your boot partition, and they are absolutely crucial. The commands that go into these files govern what your system software configuration looks like to the software, and which functions are to run at boot time. They are rather esoteric (to say the least), and not something that a novice should play with. One should change them only when necessary, and only when you know what you're doing.

Guru Needed

While many first-time Atari users need help at one time or another, it really is possible to take the machine out of the box, hook it up, and start using it. I looked back at my first column in this series, and the problems I had getting started were really pretty trivial. The only way a new PC owner can get started that easily is to buy a pre-configured package, which includes software already installed, or to enlist the services of a "guru," e.g., a sympathetic friend who knows how to set the system up for you and is willing to spend the time to train you.

Problem is, as soon as you run into trouble, you have to call on your guru or the dealer. The guru may have better things to do (he or she may never want to see you again). The dealer may not be prepared to troubleshoot the system unless you bring it back. In my view, the only way out is to become knowledgeable about some of the inner intricacies of the "PC," and this is not a task for everyone.

I now have this thing working, and all the software installed. I even typed part of the first draft of this article with *Microsoft Word* on the "PC." The only viable way to transport documents between the PC and the Atari, however, is plain text. *Word* will import Atari *WordPerfect* files, but won't export them. ‹Sigh›

The Junkyard Pussycat

by John Barnes

What Is the Information Age?

Back when the Junkyard Pussycat was standing the night watch at the University of Maryland's computer center trying to analyze data for his master's thesis there was a certain excitement in the air at being privileged to be on hand for the birth of the Computer Age. There was, of course, no way to know that computers would eventually become ubiquitous to the point where even automobiles would need brain transplants when they stopped running.

Into the Information Age

Now, only a little over 30 years later, we are already well on our way into another Age--the Information Age. Where the Computer Age was marked by skill in hardware and the refinement of rudimentary software, the Information Age is more concerned with content, the data that expresses the images that guide our lives.

The cubic centimeter of space that held a single bit of memory 30 years ago now holds something like a million bits, and a further densification of 100,000 times seems feasible. Pieces of copper wire that were barely able to transmit enough information to make a telephone call may soon be capable of bringing moving images, if not television, into our households. Encyclopedias have shrunk onto the same media that hold music. Need a telephone number? Pop a CD-ROM into your player and look for it among 71 million of them.

FAX machines, once used only by newspapers, are now everywhere. Real estate agents and drug dealers alike can now reach out to anywhere in the world from their automobiles or street corners through the wonder of cellular telephones.

Voice mail, electronic mail, FAX machines, and laptop computers let people take their office work with them wherever they go. Vast data banks are only a few keystrokes away from the people who need (and can pay) to access them.

Data Highways and Other Wonders

The Pussycat has recently been struck by all of the attention that these matters are receiving in the popular press. White House technology wonks speak of "data highways" as part of our national infrastructure. *TIME* magazine mocks hypertext while highlighting "cyberpunk" as a feature of popular culture. A writer in *Forbes* forecasts the day when libraries will be replaced by a vast network of disk farms. Radio ads feature books on navigating the Internet. Eastman Kodak announces a consumer service to place cherished photographs on CD-ROMs. News stories warn of hackers employed by organized crime to further their nefarious enterprises.

The notion that the CIA should sell some of its espionage data to private corporations so that they can more easily grapple with their foreign competition seems completely logical in the Information Age.

Man the Hunter-Gatherer

When our Stone Age forebears used their skills to hunt down and slay animals, or gather bits of grain, their tools were artfully shaped pieces of flint. Flint, it turns out, is a particular form of silicon dioxide. By means of modern day alchemy scientists have transformed silicon into microscopy tools that some of today's hunters use to snare tidbits of information that they can barter for food, clothing, and shelter.

Today's warriors use other bits of refined silicon to rain down death and destruction from a far greater distance than a flint arrowhead could ever hope to achieve.

While mankind has shown great cleverness in this evolution we must ask whether it is enough. Can the torrents of information that our machines are able to manipulate be harnessed to improve the lot of human beings?

Shaping Our World

The last few generations of mankind are the first that have had the power to reshape our planet and have exercised it, even if unwittingly. The seers of our day may be acquiring the power to reshape the human race itself.

Medical science, aided by powerful diagnostic machinery, has already reshaped our society by prolonging human life.

Other technologists, aided by their faithful silicon machines, are picking apart nature's scheme for encoding the information that directs the way life is formed and expressed. They have already devised ways to mimic Mother Nature's information processing schemes in a variety of areas.

Certain scientists, claiming to replicate the forces of climate in computer simulations, are convinced that Man must take immediate steps to correct some of his misdeeds before the planet Earth is rendered uninhabitable. While nature on a large scale appears to behave fairly smoothly, other scientists are discovering that their models are imperfect because nature is chaotic on a fine scale.

Recent news stories about possible collisions with asteroids serve to show how our lives become more complex as our knowledge increases.

Computer-assisted design and computer-assisted manufacturing are reshaping the way that we produce useful (as well as useless) artifacts. These Information Age tools help us create products that are sometimes made obsolete by better ones almost before they can be manufactured.

It is certain that we live in times that are changing rapidly and much of that change is accelerated by our ability to access and manipulate information.

Bread and Circuses

Mankind has had a penchant for distraction throughout history. The hucksters of the Information Age have turned this to their advantage with a multiplicity of gadgets that use sounds and images to amaze and amuse us. Is it art? Is it literature? The Pussycat's brief exposure to *Battle Chess* leaves him unconvinced that the new ways of gaming are necessarily better than the old.

The announcement that Southwestern Bell picked up two local cable companies shows the road that the information brokers want to take. They hope to increase the bandwidth of the pathways into our homes and then use the new pipelines to peddle soda pop in our living rooms.

The Pussycat was somewhat appalled to learn that Bill Rehbock's demonstration of the Falcon 030 entails moving something like 100 megabytes of data through the machine in something over 3 minutes to produce a kaleidoscopic and cacophonous melange that becomes tiresome after about the first 1 1/2 minutes. Most of the 100 megabytes is apparently taken up by the sound track while the visual part is largely a rehashing of a small number of frames.

The Pussycat's experiences with "multimedia" to date have mostly been annoying in that they constrain the viewer's pace and interaction. Clearly, we do not yet have the capacity to make sight and sound as stimulating as what we see in live performances or on the best recording media.

The Pussycat has not yet seen the Photo CD technology up close, but, as an occasional photographer, he knows that a decent lens is capable of imaging something like 100 line pairs per millimeter onto a piece of film. This means that a 24x36 mm color slide digitally rendered in 24-bit color would require something like 27 megabytes to express a single complex image. The Photo CD technology gets by because we really do not need all of that resolution to understand a photograph.

An art photographer friend of the Pussycat's pointed out that there are many commercial uses of photography that no longer use film at all. Studio cameras put their images right onto disk storage whence they go direct to press. Commercial photographers can get away with this because magazine and catalog illustrations can convey their message with rather relaxed requirements on spatial resolution and tonal range.

"Virtual Reality" is a buzz phrase for something that Aldous Huxley showed us when he described the "feelies" in *Brave New World.* Will future civilizations attempt to keep the disadvantaged at bay by wiring them up for anesthesia by sensory overstimulation?

Information Pollution

Those who frequent the online services or other electronic bulletin boards already know the meaning of information pollution. Sifting out meaningful data is like mining for gold hydraulically. It seems that no one thought can amount to more than about a screenful of text. The medium seems to stimulate garrulousness, and message threads often wander off into matters totally unrelated to their original thrust.

In the sciences, there have been serious proposals to create "electronic journals." Most such proposals seem to have foundered on the canon of scientific ethics that says that no work is acceptable until it has been reviewed by one's peers. The Internet and Usenet are, however, full of "newsgroups" that oppose this establishment notion. An active thread on a topic of current controversy will bring dozens of pages into a subscriber's mailbox each day.

Older schemes like books, magazines, newspapers, films, etc. had the virtue of requiring some coherence in their content. In order to attract and hold an audience the material must be interesting and have some sense of continuity.

We need to improve our standards for quality in information as well as our ability to handle it in quantity.

Privacy in the Information Age

How will anyone be able to retain some semblance of privacy when their supermarket transactions (let alone their reading and video viewing habits) can be pulled up on a screen by anyone who is willing to pay for the data? Why should our employers have the power to foretell the day of our death by poking at our genes? Can the cops really amplify bits of DNA well enough to send people to death row?

This problem was foreseen many years ago, when the Congress tried to fend off Big Brother by putting severe restrictions on the government's ability to build huge data banks. They were not farsighted enough to see how credit cards and other forms of transaction processing would generate masses of personal data within the private sector. They also did not foresee how valuable this information would be and how readily it would find willing buyers and sellers.

The struggle over protecting privacy may well be the final element that is needed to effect total legislative gridlock.

Information Age Sweatshops

How does the information get into the data banks? Some of it is garnered by machine from other data banks. Some of it, census data for example, is a by product of other activities. Newspapers, magazines, and map publishers use computers to automate their production, so it is no big deal to funnel the stuff onto disk somewhere else.

In other cases, workers must transcribe the stuff from one form to another. Insurance claims might be a good example.

It is not difficult to picture legions of harried typists pounding away at this sort of work. One sees occasional press reports of problems with carpal tunnel syndrome, eyestrain from VDT's, skeletomuscular problems, and, most recently, worries about cancer from cellular phones.

Will telecommuting become another scheme for sweating piecework out of harried mothers struggling to make ends meet?

Even automated scanning of text has its drawbacks. The process makes enough mistakes to produce rather annoying copy and it is acutely sensitive to the quality of the image that it is trying to analyze. The process is also much too slow to accommodate any great volume of material. Perhaps this is why the CD-ROMs on the marketplace have such a meager content.

Text material in a large database is largely useless unless it has been indexed. Indexing is a labor-intensive proposition requiring some degree of skill, so that one often sees material that is indexed either poorly or not at all, thus rendering access very difficult.

It certainly seems that each new "Age" brings its own crop of people who have to do the dirty work.

Limits to Growth

It is expensive to maintain massive file systems and to provide the communication links to move the data from warehouse to end user. This effectively limits the amount of information that can be stored.

We can expect some progress in these areas and we already see a steady improvement in the quality and variety of information that can be accessed digitally. We are also seeing steady reductions in the unit cost of mass storage. The power of the engines for sifting through the data is also showing a steady improvement. Modern workstations can be fitted with gigabytes of mass storage and hundreds of megabytes of memory for much less than the cost of an 80's vintage minicomputer.

All of these trends will act to expand our capacity for manipulating information into the foreseeable future. Absent some fundamental new physics we will, as the size of our information holding elements continues to shrink, ultimately run into quantum mechanics and the Uncertainty Principle, which implies that the act of observing a physical state renders future measurements of that state uncertain. It is likely to be a very long time indeed before we see anything like Isaac Asimov's "positronic brains" that endow humanoid robots with a higher moral sense than humans can be expected to possess.

Which will run out of steam first? the Information Age or the human race?

What the Future Holds

The preceding paragraphs reflect the Junkyard Pussycat's usual sober realism in the face of the hyperbole of the mass media. The evidence to date suggests that the Information Age is, like other Ages that have come before, anything but an unalloyed blessing.

Some people will benefit from the knowledge and the technology that the Information Age will bring them. Others will slip through the net and continue to live in deprivation. The gap between the haves and the have-nots will surely widen, as it has through all of human history.

It is clear that we need to improve the tools we have for coping with the deluge of data and we need to find the wisdom to use the data properly.

Only history will tell about the wisdom part. The progress being made on the tools part, rudimentary as it is, is the subject of next month's trip around the Junkyard.

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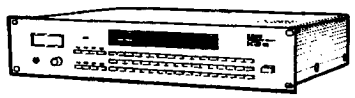

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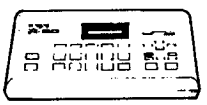

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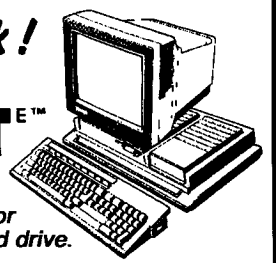

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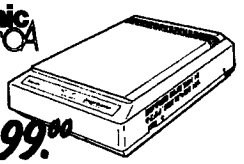

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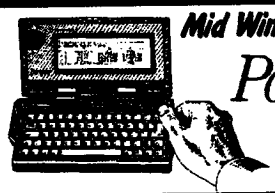

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A Darkroom on Your Desk

Running Out of Ram by David Barkin

In the last issue of *Current Notes*, I introduced the Halftone/Color Scanner. This issue will be the first of a follow-up series about the software available to take advantage of this capability. This article may be a disappointment. I had hoped that there would be a plethora of new programs available to take advantage of color and halftone scanning. There *are programs to take advantage of this capability and these are superior programs.* The problem is that they are tremendously overpriced. I'm talking here about the programs *Retouche Professional Black and White* and *Retouche Color and Design.* Both of these programs were developed over three years ago by 3K Computerbild, a German company. These programs were actually far superior to anything then available for the Mac or the IBM. Unfortunately, they were, at that time, priced too high for all but the most professional of users.

Today, they are still on the cutting edge of computer photo manipulation software, but they've lost their clear advantage over other programs on other platforms. On the other hand, they certainly haven't dropped in price. Goldleaf Publishing is selling them for $1,499 and $2,399 respectively and San Jose Computer, which sells a slightly different version of the software, sells them for $1,000 and $2,000. Even Goldleaf, which apparently no longer enjoys exclusive rights to these programs, is saying that they are overpriced. They may, in fact, be saying this because they are about to introduce a whole slew of German imports from a different company that, they claim, will do the same and more than the Retouche family.

The New Mac's Marketing Attack

With the price of computers being what they are, it would almost pay to go out and buy a Mac and *Photoshop* for about the same price as *Retouche CD.* This actually is not as worthwhile as it may appear. All the new batch of low-end Mac's that have 68030 processors are actually crippled in the same way that the IBM SX chip is crippled, i.e. they are not true 32-bit machines at all. Apple must have said to themselves, "Hey, if IBM could shave $300-$400 off the price and get away with it, why not us? We can put a 32-bit processor in a 16-bit machine and who's gonna know? Tough!" (Yes I know, I know, I'm just making up the preceding conversation.)

The Mega STe is actually a faster machine than the new slew of low-end Macs. Now, if you want to do photo manipulation for a living, you're going to have to unload big change on a high-end Mac or, and this is where this article comes in, on a TT or a Falcon. Another route would be a Mega equipped with a true 68030 accelerator board and some extra memory. To put it another way, four megs for fun, eight for serious black and white, and at least 12 for color.

Before continuing with my promised description of the promised wonder land of programs, which are *not* yet out, now let me pause, feed the ravenous imitation pit bull gnawing on my shoes, and give a brief description of what photo manipulation is all about.

Computer Photo Manipulation

Years ago, in a different universe, I dreamed of doing my own photographic development. I had dreams of going professional as a photographer and diligently wedged not only my nose but the entire upper part of my body to the grindstone. At some point in this odyssey, I realized that I would not only have to master the mechanics of photography but photographic manipulation as well. In short, I needed a dark room, the paraphernalia that goes with it, and most of all, the desire to do boring, meticulous, repetitive work with chemicals for hours and hours each day. Even though I had given some one-man exhibitions, I more or less gave up this career. As much as I loved the photography end of the business, the darkroom part was too much like work.

But now is a new time in a new era. With my computer, where almost no kind of work *feels* boring, I have a much more sophisticated darkroom then I ever could have acquired in the real world (an interesting and self revealing phraseology). More or less everything that a conventional darkroom can do can be done with ease and precision with the computer. Plus, there are an enormous number of things that a conventional darkroom either cannot do or do only with a great amount of difficulty.

Let's take contrast. In a conventional darkroom, one is more or less limited to pushing the film, which is to say that during the development process we stop at an earlier point to get lighter, or push the film to make it darker. With the computer and the right soft-

Figure 1. From a 300 dpi, 8–bit (256 levels of gray) .TIF file. Top row: Original scan, high contrast, and low contrast. Second row: Light, Dark, and inverted. Bottom row: Forground inverted, background blurred, and background sharpened.

I could fill up page after page with these quicky-type effects. One has to keep in mind that these are real photo's. I could easily go to a service bureau and have these handed back to me in any resolution I wanted or even get a photographic negative. *CN*, unfortunately, cannot do them justice.

Note: Neither *Touch–Up* nor the junior version of *Retouche* are suitable for professional work. *Touch–up* can convert dithered image's into .TIF files, but the conversion process reduces them to a size and resolution that are not usable for camera-ready copy. The small version of *Retouche* suffers from the same problem. Apparently it won't load industry standard .TIF files and it must use its own scanner driver (which I can't get to work) to create files that it can load.

ware, we can control the difference between lighter and darker shades of gray. More importantly, we can *select certain colors or shades of gray and concentrate our changes on them.* Figure 1 demonstrates different forms of light manipulation. These effects took *seconds* to create. I'm not sure how long this would take with a conventional darkroom but I suspect that writing this article would be quicker. But these, of course,

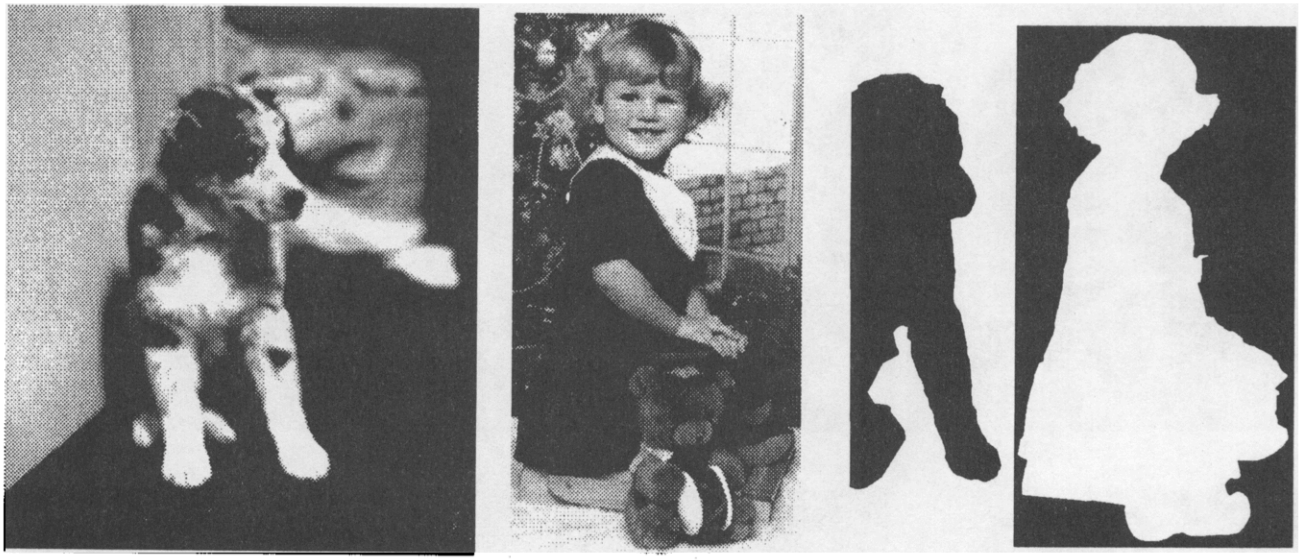

Figure 2a. Unlike the masking procedure used in *Touch–Up*, the above masks are completely separate from the images underneath them. The understatement of my life would be to say that this makes the production of collages much easier.

Figure 2b. Our finished collage. The results of having this printed by a service bureau or having them turn it into a negative have to be seen to be believed. Interested readers should note the slobbering pit bull. At this time he was 12 weeks old.

are just the simplest effects and hardly touch the surface.

Special Effects–Photo Collage

The preceding are examples of regular darkroom effects. What about photo collage? Once again the computer opens up entire new worlds. With photo manipulation software, it is possible to create true masks which are then used to combine different photos. For example, if I wish to add a person to an existing scene, I would outline the person in question and create a mask over the background. *Retouche Pro* comes equipped with some simple drawing tools that can be used to create these masks. There are also automatic settings but these are used to isolate colors more effectively than objects. Once my character is protected by a mask, I can add him or her to any background. If I, in turn, mask part of the background, only the trunk of a tree, for example, I can then add my person to the background and he or she will also appear *behind the tree.*

In figure 2, I use the entire process to create a simple, but effective, collage. Unlike *Touch-Up*, for example, which uses the term mask, the masks created by *Retouche* are true masks in the sense that they are *not* part of the image. They are separate

tools for either isolating parts of the image or colors within the image.

A good photo manipulation program should include special effects. Within a program like *Retouche*, a grid can be created that can then be distorted and your photograph can be overlaid onto this distorted grid. All this is mind boggling. See figure 3 for an example of this distorted grid effect. There are quite a few other special effects, but you get the idea.

Retouche CD is still a touch more effective in this game of photo manipulation than programs on other platforms. Unfortunately, other programs on other platforms can now do all these things, if just a touch more cumbersomely; certainly a heck of a lot cheaper. The pro version of *Photo Shop* (not to be confused with the version of *Photo Shop* distributed with scanners) is around $700 compared to *Retouche CD's* $2,400 or $2,000, depending on where you get it.

New Programs

There is some hope on the horizon. First and foremost, DMC is working on the English translation of the German program *Cranach Art Studio*. This is a mind boggling program combining color photo and vector graphics manipulation in one package. The demo of this program is now available and it is truly staggering. If not quite as easy to use as *Retouche*, it certainly has just as much power and speed. No doubt if enough people call DMC and let them know that there is a demand for this program, it would certainly speed up its release.

Goldleaf Publishing tells me that they are going to release a number of programs from Germany that will be modular in nature and that together will have the power of *Retouche* and vector graphic programs. These will include *Das Vector* and *Das Picture* as well as quite a few others suitable for multi-media presentation. They claim that these will start coming online sometime in February and the rest will be available by June.

Goldleaf does not rank as one of my favorite companies and whatever troubles they have, they can only blame themselves for. Still, I am anxious to see these programs in action and would like to recommend them.

Retouche, no matter which version of the software you are using, is a very solid and, despite its power, easy-to-use program. Certainly if you *need* photo-manipulation software (like I did), *Retouche* will do the job. I purchased the black and white version from Goldleaf, but I see no reason for you not to save yourself some money and pick it up from San Jose Computer. While I'm not completely happy with the *competence of the support at San Jose*, they certainly answer the phone and answer it every day.

One aside is to note that the black and white version of *Retouche* will load color photos and does allow some manipulation of these photos, but not enough for the professional user. In other words, call DMC and demand that they drop whatever they are doing, ruin their business, and get to work immediately to satisfy the greedy needs of David Barkin and release *Cranach Art Studio* by 6 a.m., this Monday morning.

Next month this column will give a long tutorial on drinking large amounts of beer in as short a time period as possible. If this does not prove possible because of a shortage of beer or the rather childish insistence of my editor that I at least mention computers, then you can expect another follow up article and a much needed updating of the last two articles.

There is also a rumor spreading through the sleazy beer and computer nerd bars of New York's East Village that they will allow me to review a new product. Until next month.

Note: After this article was written I became aware of the program *Style* by Zocra Technologies, list price $39.99, which will allow contrast control, clipping and flipping of .TIF files. In other words, about what you get when you buy a scanner on other platforms. Is this true? More on this next month.

Figure 3. This complex image has to be seen as a photograph to be appreciated. Note that there is another image which has been overlaid onto a rock in the near background. If you look closely, you will see my favorite lions. A grid was superimposed and shaped to fit the rock. These grids are similar to the contol paths in *Outline Art*.

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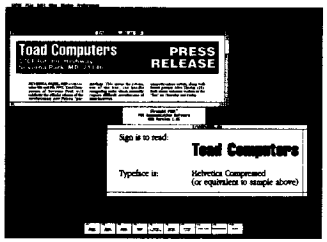

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ToadSync .39	***$279***
ToadSwitch-M	***$59***

Get LEXICOR POWER!

No one knows graphics like Lexicor Software. Their latest innovations include Phoenix 512, a surface/object rendering package for the ST that's quick and easy to use, and Cyber Color, the first "virtual reality" paint program — it lets you choose a 3D object and actually *paint* its surface, rotating the object freely on the X, Y, and Z, axes. Absolutely amazing stuff.

Prism Paint (Allows Animation)	$59
CyberSculpt (Create 3D Objects)	$34
Chronos 3D (Keyframe Anim.)	$219
Phoenix 512 (Frame Renderer)	$59
Cyber Color (3D Paint Program)	$49
Rosetta 3D (Translate Objects)	$79
Prism Tablet (Precise Control)	$209
Genesis (Creates "Planets")	$29
Render For Sculpt	$49
ToadPaint (True Color Falcon)	$59

COOL SOFTWARE

1st Word Plus 3.2	$69
3D Calc (Michtron)	$39
AES Quick Reference	$14
Arabesque Prof.	$129
Assembly Guide	$27
Avant Vector	$479
BitMaker	$39
Calamus 1.09N	$179
Calamus Font Editor	$59
Calamus Guide to DTP	$31
Calamus Outline Art	$159
Calamus SL	$599
CalAssistant (Helper)	$29
Calligrapher Pro	$139
Calligrapher 3/Gold	$169
Calligrapher Light	$49
Cardfile 4	$29
Cherry Font Packs	$29
C-Font	$29
Cleanup ST	$27
C-Manship Complete	$29
Codehead Utilities	$24
Codekeys Macros	$29
CompoScript	$199
Convector Professional	$99
Crossword Creator 2	$24
Cyberdrome	$29
Datamanager Pro	$89
DBMan v5.3	$179
Decrypt	$24
DevPac 3	$99
DC Data Diet	$25
DC Desktop	$29
DC Shower	$24
DC Utilities 2.0	$29
Diamondback II	$37
Diamond Edge	$47
Didot Line Art	$169
EdHak (Acc. Editor)	$21
First Graph	$69
Font Designer	$89
Font Designer Plus	$159
Fontverter	$34
G+Plus (New GDOS)	$24
Genus Font Editor	$169
GFA Basic Guide	$31
Grammar Expert	$39
GramSlam	$29
HiSoft Basic 2	$94
HighSpeed Pascal	$119
Home Accounts 2	$79
Hotwire 3.0	$29
Hotwire+ (with Maxifile)	$46
HyperLink	$89
Image Cat	$29
Knife ST	$39
K-Spread Spreadsheet	$139
Lattice C5.52	$189
LDW Power	$109
Logo Library	$29
Lookit & Popit	$27
Mailing Manager ST	$39
Maxifile 3	$29
Megacheck Financial	$39
MegaKern	$39
MegaPaint Professional	$159
MIDIMax 1.3	$39
MIDI Spy 1.0	$49
Migraph OCR Software	$219
MugShot	$29
MugShot Data Dsk 1/2	$29
Multidesk Deluxe 3.3	$39
MVG Graphics Viewer	$39
MVG Modules 1/2	$22
NeoDesk 3	$46
NeoDesk CLI	$22
NewDesk Icon Editor	$26
NVDI VDI Replacement	$59
OCR Junior	$119
PageAssistant Helper	$39
PageStream 2.2	$179
PageStream Qwikforms	$29
Phasar 4.0	$59
Power Print	$85
Printmaster Plus	$39
Puzzle Pack	$34
ScanLite	$19
SCSI Professional ICD	$47
Silhouette Colortrace	$94
Spelling Sentry	$39
Stalk The Market	$59
Stalker 3 Terminal	$34
Steno 2 Editor	$29
STraight FAX!	$70
Tax Wizard 1992	$39
TBX Cad	$59
Templicity LDW	$29
That's Write 2	$149
The Redacteur 3	$179
Timeworks Publisher 2	$159
Tracker ST	$69
Turbojet	$29
Turner Book 1, 2, or 3	$12
Type One Converter	$39
Ultimate Virus Killer	$22
Universal Item Sel. III	$19
VDI Reference Guide	$19
Warp 9 Accelerator	$39
WERCS	$39
Word Quest II	$29
Word Search Creator	$24
WordUp (Version 3)	$49
WP Switch	$24
XBOOT 3 Boot Manager	$39

NEW GAMES !!!

A320 Airbus	$44
Amberstar	$37
BattleChess	$24
California Games 2	$35
Campaign	$44
Captive	$26
Castles	$37
F-15 Strike Eagle 2	$44
Falcon 3.0	$31
GODS	$35
Ishar	$35
Knights Of the Sky	$42
Legend	$35
Legend Hint Book	$9
Lemmings Double Pack	$42
Life & Death	$32
Lure Of the Temptress	$37
Microprose Golf	$42
Microprose Grand Prix	$42
Midwinter	$22
Oh No! More Lemmings!	$34
Populous	$22
Populous 2 1MB Ver.	$37
Powermonger	$37
Powermonger Datadisk	$21
Rampart	$37
Shuttle	$37
Silent Service 2	$37
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Switchblade 2	$21
Vroom!	$35

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with TOS 2.06, add	***$59***
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Crazy Dots 15 (32K)	$949
VGA Monitor	$399
TTM195 19" B/W Mon.	$799
Hard Disk Upgrades	Call

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Atari Portfolio	$195
64K RAM Card	$49
BSE Serial & Parallel	$94
BSE Ser/Par w/512K	$195
Flashcard Memory	Call
PC Card Drive	$79
Serial Interface	$59
Parallel Interface	$39
AC Adapter	$9
Parallel Transfer Cable	$12

Atari Lynx

Atari Lynx	$99
Lynx Kit w/ CA Games	$139
Lynx Kit Carrying Case	$17
AC Adapter	$14

Lynx Games at $24.99: Blue Lightning, Chip's Challenge, ElectroCop, Gates of Zendocon, Slime World, Blockout

Lynx Games at $29.99: A.P.B., Awesome Golf, Checkered Flag, Chess Challenge, Gauntlet, Ishido, Klax, PacLand, Paperboy, QIX, RoboSquash, Robotron 2084, Rygar, Scrapyard Dog, Shanghai, Stunrunner, Tournament Cyberball, Turbo Sub, Viking Child, Warbirds, Xenophobe, Xybots, Zarlor Mercenary

Lynx Games at $34.99: Baseball Heroes, Basketbrawl, Casino, Crystal Mines 2, Dirty Larry, Hockey, Hydra, NFL Football, Pinball Jam, Rampart, Shadow of the Beast, Shanghai, Steel Talons, SuperSkweek, Switchblade 2

Lynx Games at $34.99: Batman Returns, Dracula! Call for new releases!

Hardware Upgrades

Xtra RAM Simm Board	$79
1MB SIMMs	$39
ICD AdSpeed ST	$189
ICD AdSpeed STE	$219
Spectre GCR	$199
Goiden Img 720K Drive	$124
PC Speed	$179
Xwitchit Monitor Switch	$39
KeySkins Kbd. Prot.	$21
TOS 1.4	$59
TOS 2.06	$59
TOS Extension Cards	Call
Atari Joystick	$7
Atari Trackball	$9
Wico Bat Handle	$22

Hard Drives Etc...

ToadFloptical	$329
ToadCD ROM	$329
ToadPlus 130	$579
ToadFile44+ (44)	$649
ToadFile '91+ (88)	$799
ToadFile 174+	$999
ToadFile '91/130+	$1149
ToadStor 20	$239
ToadStor 50	$329
ToadStor 130	$399
ToadStor 213	$569
ToadStor 44+	$429
ToadStor '91+	$549
Maxtor 213MB Mech	$469
Maxtor 130MB Mech	$349
SyQuest 44MB Mech	$379
SyQuest 88MB Mech	$549
SyQuest 44MB Cart	$69
SyQuest 88MB Cart	$109
Floptical Disks	$20
ICD Link & DMA Cable	$94
ICD AdSCSI	$89
ICD AdSCSI+	$99
ICD AdSCSI Micro	$89

ToadStor, ToadFloptical and ToadCD ROM drives require the ICD Link for use on ST/STE. ToadFile and ToadPlus drives come in our expandable 2-bay case with front-mounted power switch. Call if you have questions. All drives have external SCSI ID switches.

Atari Monitors

SC1435 Stereo Color	$299
SM147 Mono	$189
Toad RGB	$239
Magnavox 1CM135	$289
Toad Multisync	$279
(see special above)	

Atari Mice

Beetle Mice	$27
Golden Image Mouse	$34
Golden Image Optical	$59
Golden Img Cordless	$59
G.I. Cordless Trackball	$59
Alfa Data Trackball	$59

Scanners

Golden Image H.S.	$199
Migraph w/OCR Jr.	$299
Migraph w/TouchUp	$219

Printers / Supplies

HP Deskjet 500	$409
HP Deskjet 550C	Call
HP LaserJet IV	Call
Canon BJ-10e	$259
Star NX-2420 Rainbow	$299
Atari SLM804 Refurb	$579
Atari SLM605 NEW	$999
Atari SLM804 Toner	$38
Atari SLM804 Drums	$179
Atari SLM605 Toner	$29
Atari SLM605 Drums	$129

Cables

ST/TT Printer	$12
ST Modem	$12
MIDI (2 Cables)	$9
TT SCSI	$18

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OutBurst! *The Printout Accelerator!*

If you own a high-speed printer (like an HP Deskjet or Laserjet) you're probably starting to wonder why printing from programs like *PageStream* or *Calamus* is so ***slow!***

When the ST's operating system was written, printers couldn't accept data very quickly. So ***OutBurst*** replaces the part of the ST's OS that talks to the parallel port. And it's a lot faster – up to 23 times faster!

OutBurst also comes with a free ***Intelligent Printer Spooler!*** The spooler will return control to you while your computer is busy printing! But not all applications benefit from using a spooler, so you can define a list of programs which should bypass the spooler, quickly and easily.

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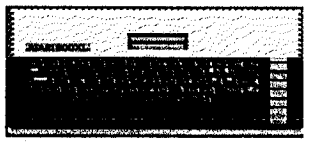


One Year Anniversary

by Richard L. Reaser Jr.

How Are We Doing So Far?

This column marks my one year anniversary as *Current Notes* 8-bit editor. It's been quite an eventful year. We've brought you this column ten times from three states, edited and published 29 Atari 8-bit specific articles and even fathered twin girls in the process. In all, we've had about 100 pages of 8-bit specific coverage in *Current Notes* my first year. Even Dave Small wrote an article about putting an 8-bit in his muscle car without any solicitation from me. Indeed, I've found a lot of the other items in *Current Notes* useful as an 8-bitter. I especially enjoyed J. Andrzej Wrotniak's "Programming as a State of Mind" series. Hopefully, you've felt *Current Notes* to be a good investment.

We've met most of our objectives this past year. My overall theme has been to bring the various Atari 8-bit worlds together. That is why I've had such an emphasis on telecommunications and have been active on the networks. We've had some success in this area.

In terms of coverage, I think we've managed to adequately address the six areas I laid out in my first column. We've been answering your questions in both hardcopy and electronically. We've had some articles on how to make better use of your computer (though I'd like to see more on this subject). There's been no shortage of news. New products are regularly announced and reviewed. We've also had numerous hardware and software reviews for products that have been on the market for awhile. And I've kept you up to date on the latest information on product sources.

In order for me to keep up the coverage, I need your help in two areas. First, I need to know whether we're on target. What do you want to see or not see? What's right? What's wrong? In other words, keep giving me feedback. Second, I need your personal involvement. I need people to come up with the ideas and write the articles. I need people to give me leads for information, articles and stories for my own column. Sometimes it gets scary as deadline time approaches and my "cupboards are bare" in the article department. Fortunately, some good soul always bails me out at the last minute. It would be nice to not have such cyclical blood pressure, though. Your help is critical to our future success at *CN*.

Where do we go from here? Our present direction seems to be OK, so we'll continue down this path. I really would like to hear more about how you out there in readerland have made peace with your computers, though. Have you put your 8-bit to some good or unusual use? What's your secret to maximizing productivity? How have you made your computer easier to use? Write about it so we all can learn from your experiences. Writing helps keep our machines alive. *Current Notes* is one of the last regular magazines that supports your computer. Without good articles we can't survive. So plug in that *AtariWriter* cartridge and start typing!

Elsewhere in This Issue

Gordon Hooper returns this month with some humor from north of the border. By the way Gordo, I have so many devices on my computer desk, that I need *two* powerstrips.

We also have a second Canadian joining us this month, Dennis Trowsdale. Dennis is the network coordinator of a large Atari 8-bit based computer network, the Universal SysOps Federation (USF) Network. I learned of Dennis' effort while tracking down an author for the International Atari Network article that appeared in the Dec 92/Jan 93 *CN*.

Last month, we ran a piece about the *.QWKsilver* offline messaging system. While researching that, I learned about another similar program called *PabQwk* and found Bill Mims via FidoNet in the process. Bill reviews the latest version of *PabQwk* for us. He wrote about the previous *PabQwk* version in *Atari Interface Magazine*. Bill is active duty Air Force, like me. (I swear we're not taking over.) He's been an 8-bit kind of guy for 3 1/2 years now. Bill is very interested in putting together a comprehensive Public Domain Software Library.

Finally, H. Jake Obrich joins us for the first time with a review of Newell Industries' *Omniwriter*. Jake is President of the Rockford Atari Computer Club (RACC) and an all-purpose fount of knowledge when it comes to our computers.

For Your Bookshelf

Being in academia here at the Staff College, I've had the "opportunity" to spend a lot of time in our well-stocked library. I've been rummaging through the numerous volumes and came across a few titles that might be of interest to you.

Pay attention to this first title. **!%@:: A Directory of Electronic Mail Addressing and Networks**, by Donnalyn Frey and Rick Adams, O'Reilly & Associates, Inc. publisher, 1991 revision, 420 pages. This book provides a quick reference for over 130 of the world's computer networks and their associated electronic mail services. Each entry contains information as to the network itself, connections to other networks, network architecture, facilities, addressing structure and format, future network plans, contact address for the network, related networks and a map of the network. There are several appendices that give detailed information on address domains. The book also comes with a handy cardboard pocket guide, which was still in the copy I borrowed from the library! You can order the book by calling 1-800-338-6887. Give up on what the "!%:" is in the title? They are the common delimiter symbols used in addressing electronic mail.

My dad loaned me the next book. (That reminds me, I ought to return it someday.) It's called **EcoLinking: Everyone's Guide to Online Environmental Information**, by Don Rittner, published by Peachpit Press (on recycled paper), copyright 1992, ISBN 0-938151-35-5, 352 pages. First, I am not an environmentalist by any means, but I found this to be a superbly done book from the computer end. It is an easy to read and understand "Computer Networking 101" text. It covers getting "on-line," global computer networks, electronic bulletin boards, commercial on-line services as well as library services. The sections on FidoNet and the Internet are the most comprehensive and understandable I've run across. The slant of the book is obviously towards environmentalism, but the beauty is that it shows a very practical application of computer networking technology for non-computer-techo-geeks. I came away with a lot of insights in how to use computer networking with my 130XE.

As you can see from above, I'm very hot on the computer networking concept. It is a real boon to us 8-bitters. I network daily, now. I'm now getting a lot of 8-bit related e-mail from Europe via the Internet, GEnie and CompuServe. When I have a chance, I can suck down foreign correspondence from the United SysOp Federation Network or the International Atari Network as well. Most of the articles you see in *CN* on 8-bits were "networked" at least twice. Articles are usually submitted to me via e-mail or via a bulletin board. I send all the edited articles to our publisher via GEnie e-mail. So I'm always trying to learn more about computer networking. It makes my life easier and it's fun to correspond with those in far off places as well. I hope to see a lot more of you "on-line" soon.

GEnie

A lot of heavy construction has been going on in the GEnie 8-bit Round Table. The message bases have been purged and the old messages are now available as files in the library. In addition, the Library categories have been totally reorganized.

Since our announcement last month, scads of Antic, ANALOG and Compute! disk programs are now available in the GEnie libraries. Check this out!

CompuServe

This month, I'm going to pass on a few tips that SysOp Don LeBow has passed to me. I'm getting a lot more proficient at using CompuServe. Hopefully, these items will be helpful to you as well.

The YMODEM implemented on CIS is true Ymodem batch. However, unlike GEnie, CIS doesn't directly support multifile batching. (Don says it does, if your batch is limited to one file. Real cute, Don.) Perhaps this feature will be added in the future.

Xmodem 1K is also available, but it doesn't appear on any of the menus! You can invoke it from the command line, however. It turns out that you can change your protocol at any time by using a command line specifying the one you want to use. The format is:

```
DOW PRO:xxx
```

For `xxx` substitute the abbreviation of the protocol you want to use, e.g. `XMO`, `YMO`, `X1K`, `B`, `QB`. See the `X1K`? The same approach can be used for uploading:

```
UPL filename.ext PRO:xxx TYPE:ascii
 (or TYPE:bin)
```

If you find one protocol you use most often, you can `GO TERMINAL` (a free area) and follow the menus to select a default protocol which CIS will always use, unless you force another one via the command line.

The fastest file transfer protocol for 8-bits on CIS is Bob Puff's special CIS Fast Xmodem, from *BobTerm*. It uses 'send ahead' to speed up the transfers, so basically, ACKs are instantaneous. See Charles Cole's *BobTerm* article in the July/Aug 92 issue of *CN* for more on this.

Lists of files in the library are now available as files in the library, by library. (Was that confusing enough for you?) Now you don't have to `BROWSE` online to see what's available. You can D/L a file(s) with the list instead.

Atari Classics (AC) Update

Ben Poehland has distributed approximately 1,700 free copies of the premier issue of *AC*. The few remaining copies of the premier issue are now no longer free and are available as back issues. Back issues of *AC* and the disk are available for $3 each.

As of mid-January, paid subscriptions total somewhere around 350-400. Of the original 615 people who returned cards during Mail Campaign, fewer than 200 have honored their pledge. *AC* needs 500 subscribers to maintain a full production schedule. If this doesn't happen, *AC* won't be able to maintain a full bimonthly schedule in 1993. This means there probably

will be only five issues instead of six. Additionally, *AC* won't be able to afford a 2nd Class mailing permit. That means *AC* will continue to go out 3rd Class Bulk, which is very slow. (*CN*, by contrast, goes out 2nd Class.) Finally, *AC* will not be able to expand beyond the present 32 pages.

It's not too late to change things. Let's try to help Ben meet his goal of 500 subscribers. Subscriptions are still $25/year for the magazine and $9/year for the disk. (Non-USA parties, please inquire for overseas rates). Contact: Atari Classics, 179 Sproul Rd./Rt. 352, Frazer, PA 19355.

Atari Interface Magazine (AIM) Update

For those of you who haven't heard, *Atari Interface Magazine (AIM)* is "on hold." Essentially, the Fall "newsprint" issue was the last one published. Unicorn Publications is waiting to see how the Atari market goes before printing any more issues. Apparently, *AIM* is very dependent on advertising and several of their big advertisers aren't buying space anymore or are in arrears.

At a recent CompuServe RealTime conference Patti Rayl of *AIM* mentioned that she and Bill are starting up another magazine called *CONNECT!* under a different company name. This magazine should be on newsstands by the time you read this. She said that they have orders for 65,000 copies! *CONNECT!* will deal exclusively with on-line issues for all computer systems. I'll report back on this when I see it.

Needless to say, the apparent demise of *AIM* is bad news for the Atari world in general. I just hope that all those former *AIM* 8-bit authors start directing their stuff to me where it will be put to good use. (Hint!) I think it is also important to note that *Current Notes* is starting its 13th straight year of publication. I've been subscribing for 10 years straight. I don't recall ever missing an issue and, as you know, since I'm military, I move all over the country. I hope everyone appreciates the fine job Joe and Joyce Waters have done with *CN* on both the business and content end. It's been truly an amazing feat, especially considering what has happened to the so called "competition."

8-bit Income Tax Program

Steve Karasek updated his Income Tax program for the 1992 tax year. Previous owners of the program can obtain the update for $12.00 plus $2.00 shipping. New owners can get it for $24.95 plus $2.00 shipping. His program is not as fancy as Harry Koons' Tax Advantage was, but it does the job and I've used it the past three years. For further information, contact: Steve Karasek, 855 Diversey Drive, St. Louis, MO 63126. Phone: (314) 961- 2052.

Elwood J.C. Kureth Located!

Perhaps you remember that lone 8-bit author who used to write for *Atari Explorer* before they discontinued 8-bit coverage. Well, with a little help from the "new" *Atari Explorer* editor, I found him. Elwood's alive and well in Michigan and still an active duty Army Captain. He still has all his equipment and now a copy of *BobTerm*. We'll have him working again soon, cranking out quality articles for *CN*.

Newell Industries

Wes Newell is still supporting our Atari Classics. I've uploaded his latest product list and prices to GEnie (file #6265, NEWELL2.ARC) and CompuServe (Library 17, NI0211.TXT). Wes is active on the FidoNet Atari 8-bit Echo. Wes's products include several super memory upgrades, the RAMROD XL Operating System, which includes Fastchip, Omnimon and OSNXL, the Omniview 80 column modification, and an 8-bit business program that runs on BASIC XL. Wes is writing an article on 8-bit memory upgrades for *Current Notes* which will appear soon. For further information please contact: Newell Industries, P.O. Box 253, Wylie, TX 75098. Voice Phone: (214) 442- 6612; BBS: (214) 442-2584; FidoNet Node: 1:124/7028.

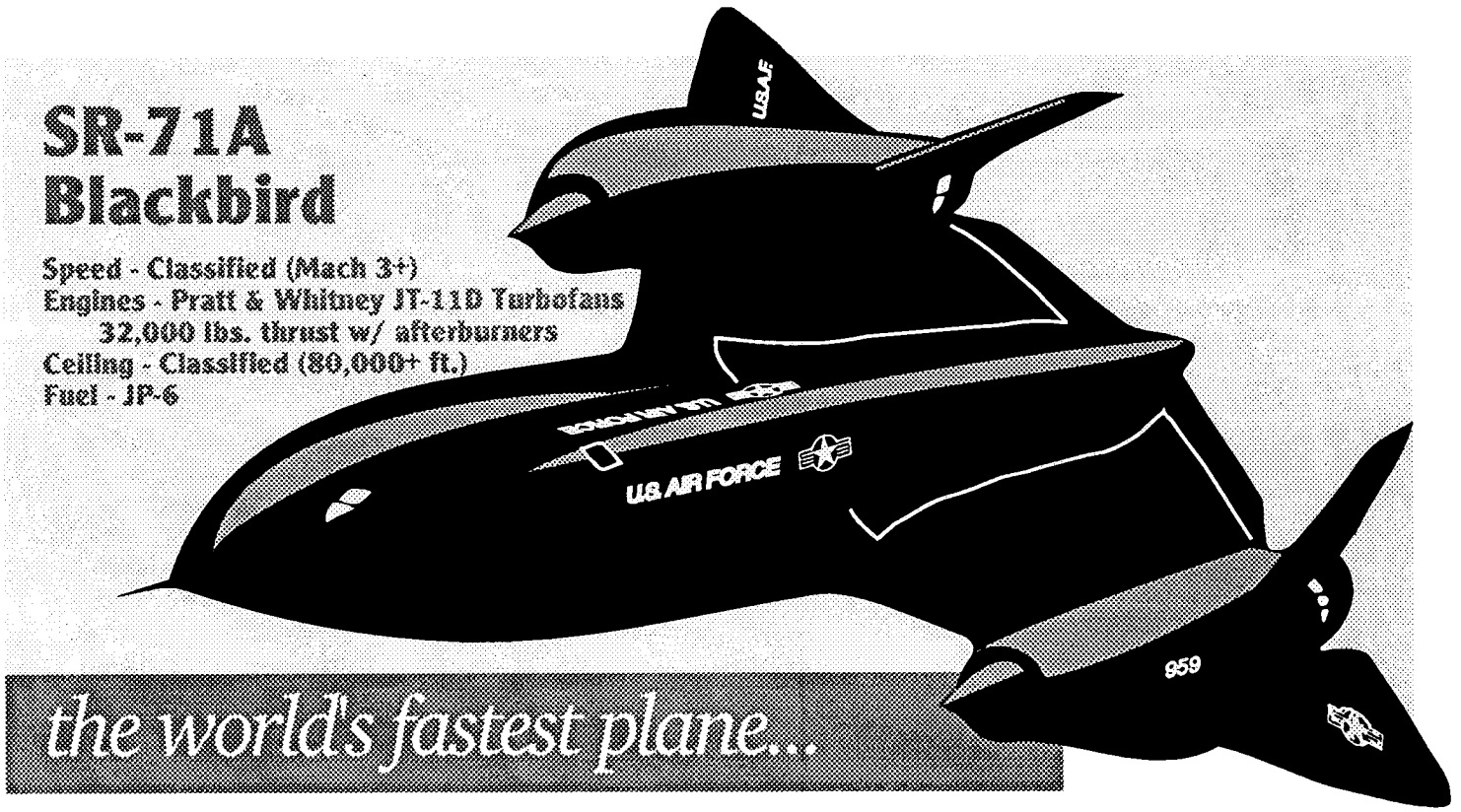
Tyne & Wear Atari 8-bit User Group (TWAUG)

The chaps at TWAUG have started a new bimonthly newsletter with an accompanying disk. They sent me a copy of their preview edition in return for some *Current Notes* issues. The newsletter was 24 pages long and consisted primarily of reprints of articles that have previously appeared in other newsletters and magazines. The newsletter was produced entirely using 8-bit equipment, had a heavy stock cover and actually looked quite nice. The disk was quite interesting, as are most European disks. It had several programs I had not seen before, including several games. The premier issue contained advertisements for several other British 8-bit newsletters to include the *Excel Disk Magazine* and the *Futura XL/XE* newsletter from Scotland, *Boot! The Official Newsletter of LACE*, and *8:16* from BAPAUG. A year's subscription to the *TWAUG* newsletter and disk is 11 pounds. For further information please write: TWAUG, P.O. Box 8, Wallsend, Tyne & Wear NE28 6DQ, United Kingdom.

As a side note, where do the Brits get these cutesy little names for their towns? Every time I address a letter to the UK, I feel like I'm sending something to a fairy tale.

That's all for this month. Be sure to write or E-mail your requests, questions or complaints to me as shown by the table of contents near the front of the magazine.

feel the need... THE NEED FOR SPEED



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Fuel - JP-6

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Don't Let This Happen to You!

by Gordon F. Hooper (c) 1992

I think I'm turning into a much-dreaded computer geek. It started with an innocent trip to a computer store, just to look around. As president of a computer users group, I feel it's necessary for me to keep abreast of what's happening in the computer world. But there should be no legal way for me to enter these places. The same goes for liquor stores. I cannot go in either without buying something, to the detriment of my wallet, not to mention my liver.

At any rate, I was looking around the computer store at all the IBM products, which are useless to me with my 8-bit Atari, when I spotted what was called a "Power Center." This is basically a power bar and does the same thing, except that it sits under your monitor and has a lighted rocker switch to turn on and off each individual component of your computer system.

The things which caught my eye were the rocker switches, each of which had an LED in it. Under each switch was a label, COMPUTER, MONITOR, PRINTER, AUX1 and AUX2. There was also one labelled MASTER. You can imagine my delight when I found that pushing each switch caused the associated LED to come on.

I guess this infatuation comes from growing up watching Star Trek when it originally aired. I mean the real show, with plywood sets, people who couldn't act and lots of flashing lights. You'd think after 25 years of trying, they would have learned how to act, but after viewing Star Trek VI, the only thing they learned was how to go grey and get fat. Anyhow, I grew up thinking that anything that had flashing lights was new and exciting and a harbinger of the future. A display of LED's puts me into immediate ATTRACT/EXTRACT mode. The lights attract my attention and make it much easier for the salesperson to extract the money from my wallet.

Fifty–One dollars and 87 cents later, I was the proud owner of my very own power center, which I needed about as much as Ross Perot needs a Ferengi mask. This couldn't be considered one of my more astute moves seeing as how it did the same job as my existing $9.95 power bar, but it sure did look great after I set it up. The problem came in setting it up.

The desk my computer sits on was built by my favorite uncle when I was in 5th Grade. It was always a nice desk, but as my computer geek-like tendencies grew, I had to build small extensions on either end to house my ever-expanding computer system. Every component I've added also has its own power cord. Now that I have a computer, monitor, amplified speaker, two disk drives, a modem, two printers and an XEP80, there's a lot of wire behind that old desk. And I mustn't forget the "Power Center," which has its own cord.

I don't know how a perfectly straight cord that you run from the individual item to a wall plug or power bar can magically become tangled up with every other cord back there, but it looked like a deranged mating ritual of singularly horny snakes behind my dear departed uncle's desk. The poor old guy would have been shocked.

Given that I couldn't move the desk because of the extensions I built on either side, how was I going to get the wires from the floor up to desktop level to plug them into the power center? For that matter, what the heck am I going to do when I have to move? I guess I'll just have to sell the house minus my computer room, and remain holed up there for the rest of my natural life.

Being a budding computer geek, I tried to think of a high tech way to sort out the wires, but ended up using that venerable old standby, the metal clothes hanger. I unwound it, straightened it out and put the plug end of the components' wires onto the hooked end of the clothes hanger to lift them up. I bet somewhere along the way even Stephen Jobs used the ubiquitous coat hanger in the process of making the first practical home micro-computer. He probably ran out of wire at 4 a.m. one morning and pressed the coat hanger in as a substitute. I know I made an emergency electrical repair with one on my car late one night. You don't want to know what the clothes hanger was doing in my car, why I was out late at night, or why I'm now spending time at the library looking for information on STD's. [Editor's Note: I had to call Gordon to find out what an "STD" was. If I was in the Navy, I'd probably know what one was. It's all part of that "Canadian humor" stuff, I suppose. Drop me a line if you want to impress me with your knowledge or are just curious.–RR]

After everything was connected and I had gloated for half an hour about how impressive the lights looked while pushing the switches on and off, I sat down at the computer to write a letter asking William Shatner for advice on how to overact. When I finished, I wanted to turn off the printer and use the other one, so with a quick glance at the power center, I pushed the switch. Oops! It was the COMPUTER switch I turned off. Too bad I hadn't saved it to disk. After swearing for a few minutes, I realized if I had been satisfied with the original power bar this couldn't conceivably have happened. Trust me to come up with a brilliant new way, that costs money, to lose data. That must be the reason they made me president of a computer club.

Oh, well, I guess I'll go out and trade in my glasses for the horn-rimmed variety and buy a plastic pocket protector so pens won't stain my shirt. Maybe I'll even go whole hog and buy a bow tie so that I look like the ultimate computer geek, an IBM owner.

OmniWriter

80 Column Word Processing Made Easy for your Atari 8-bit

Review by H. Jake Olbrich

People use word processors to make writing easier. It follows that when choosing a word processor, ease of use is the most important feature. An 80-column word processor is easier to use than a 40 column one because you see twice as much, and the screen looks more like the printed product. So 80 columns is preferable to a 40-column system. Atari 8-bitters have several 80-column word processors to choose from. These include *Letter Perfect*, *AtariWriter+ 80* and *OmniWriter*. *OmniWriter*is probably the least known of the three and the focus of this review. *OmniWriter* was designed to work exclusively with the Newell Industries OmniView 80-column chip. In fact, *OmniWriter* comes free when you buy Omniview.

To further complicate matters, there are three ways to set-up *Letter Perfect* for 80 columns, two versions of *AtariWriter+ 80* and two versions of *OmniWriter*. *Letter Perfect* has one set-up for the Austin Franklin board, one for the Bit-3 Board and a Newell Industries patch for the 80-column OmniView chip. The most common version of *AtariWriter+ 80* is for Atari Corp's XEP-80. Additionally, Newell Industries has a patch to make *AtariWriter+ 80* work with their OmniView Chip. *OmniWriter* comes in two versions—one that does and one that does not access the extra memory provided by memory upgrades. Let's discuss this a little more.

Hardware, Options and Compatibility

To get 80 columns on the Atari 8-bit you need to make some changes inside your machine or add the external XEP-80. For XL and XE machines, you can get the OmniView chip from Newell for $29.95. An added feature with the Newell OmniView 80-column upgrade is that *Data Perfect* in 80 columns prints without using the Translator on XL and XE machines. However, neither *Data Perfect* nor *OmniView* access the parallel bus, so you cannot get print through the ICD MIO. Everything does work, though, using the ICD PR: Connection.

You can also add a RAMROD upgrade that lets you switch operating systems, giving a much improved keyboard operation and number crunching for an additional $49.00. Extra memory is usually important for those big word processing jobs. For extra memory, you can get ICD's RAMBO 256K. *OmniWriter* works on RAMBOs, but the Newell *AtariWriter+ 80* patch doesn't work with RAMBO. There is also a Newell 256K upgrade that is comparably priced with the RAMBO and it works with the Newell *AtariWriter+ 80* patch as well as with *OmniWriter*. I bought the Newell 1 Meg memory upgrade, which cost $89.95 with chips. Since RAMBO has a funny way of switching the ANTIC chip, I recommend going the Newell memory upgrade route. It's also important to note that in spite of the fact that RAMBO is still available for purchase from several sources, ICD no longer supports the 8-bit line. Newell Industries still does. Hopefully, by now, you've seen the advantages of the Newell option—OmniView+*OmniWriter*+Newell Memory upgrade. From here on out, I'll focus on that particular 80-column configuration.

Memory Management

Since most peope will be using XL or XE machines, I will cover that extra memory setup first. OmniView will come configured for the proper Bank Select address at D301. So, do a [CONTROL+Y], and the screen will prompt you

"Save current state (Y/N):"

Type "N" and it will prompt you with

"BS addr: D301"

Unless you have an 800, press [RETURN]. (For the 800, BS addr: is CFFF.) Now you must decide how much memory you want for the word processor itself, and how much for a Ramdisk. Indeed, if you did not upgrade your XL/XE's memory, you can use the default setting. I have my 1 Meg machine banks set up as FF E3 E7 EB EF. (For the 800 the banks are 00 0B 0C 0D 0E.) Press [RETURN] again and again do the [CONTROL+Y] as soon as you have things configured. *This time you want to answwer "Y."* This writes a file to D1: called OW.OPT. Now if you copy this to your physical disk when you exit *OW*, your memory configuration will be set.

The above memory configuration gives me approximately 80K for the document and a 720 sector Ramdisk as D1: and everything else as Ramdisk D8:. How big is 80k? This review is about 8K; three pages more or less at 70 columns and 58 lines per page, pica pitch, 1/6th inch line feeds, single spaced, and approximately 2,000 words. This leaves 72K free with a 1K kill buffer. In other words, you should have room for 40 to 60 pages, depending on how tight you push the margins, with 80K. Actually, I found there is room to put more text using *OmniWriter* and 256k than *Professional Write* on a 640k IBM compatible.

An added use of all this free "K" is to append in some other document that has some text you want to use. Here are the steps you would use:

1. [CONTROL+H] MARK TEXT (Hold position) where you want to put the appended text.
2. Scroll or "FIND" the part you want to insert.
3. Block delete the section of text you want to insert.
4. Press [CONTROL+J] to JUMP back to your MARKed spot.
5. Press [CONTROL+R] to RECOVER what you just deleted.
6. Finally, go back and "kill" or "delete" or "wipe" all that text you never wanted.

Other word processors call this or something like this "SPOOLING."

Ramdisks

D1: as a RAMDISK is very helpful for those heavy editing sessions. It also helps make things bullet proof. Look for the file INSTALL1. Binary "L" load it from DOS. "I" FORMAT D1: "H" Write DOS to D1:. "C" copy OW.COM and OW.OPT (if it exists.) to D1: Then Binary "L" load OW.COM from the RAMDISK with your switch in the 80-column position and BASIC off. If the file OW.OPT exists, it will be loaded by OW.COM and all of your set-up parameters. Now, if something happens and you want to reset or whatever, short of a power outage, a few burps and you are right back where you want to be. Physical D1: becomes D2: and physical D2: becomes D3:.

Left Screen Margin

This is neat. How many times do you need something to print out just so and no way different? To line up two columns maybe you can use the printer controls and get by. But lining up three or four columns is extremely difficult. In an 80-column printer, you probably are using at least a left margin of 5 and the same for right margin. OK, that is 70 columns. So, set the left margin with an [OPTION+CONTROL+Right arrow]. When the screen prompts you with "left margin 1," change it to 10. Your screen is now 70 columns wide, just like your printout. Now, press [CONTROL+Y] and save this "current state." Even a RESET brings everything right back. Need to change it to 71 columns? Fine, use the other arrow [OPTION+CONTROL+Left arrow] and scroll your screen to the left one column at a time.

Capitalization and Xchange Character

These are two features that I use extensively. When I am typing in my thoughts, I don't want to have to worry about every little thing. And so my rough draft looks ... well ... rough. Many times I hit the space key one letter before the end of the word. And sometimes I capitalize things I should not and vice-versa. Capping and uncapping is handled with a [CONTROL+A]. Xchanging characters, like a transposed number, is handled with a [CONTROL+X]. Little things mean a lot. These do to me.

Screen Readability

For serious use get a green screen monitor. Failing that, use a Commodore 1802 or a plain black and white TV. My 800 is hooked to a Magnavox Monitor 80. The XL is hooked to the 1802. 80 columns on regular TV is pretty tough for long use, but it can be done. The 80-column screen on the 800XL is much clearer using the OmniView chip, than using the XEP-80.

Printer Drivers and UNDERLINE [CONTROL+U]

OmniWriter doesn't have a printer driver. This is both a plus and a minus. The only shortcoming that really has affected me is in underlining. And again this is a plus and a minus. Have you ever started underlining at the right edge and continued in the next line? Did it start underlining the next column at column 1 even though you used a left margin of 5? Sloppy. *AtariWriter* is famous for this. *OmniWriter* uses the "BACKSPACE OVERPRINT" method. It is slow, sloppy, jerky, but simple. Also, there is no left margin problem.

Obtaining a continuous underline is possible, but cumbersome. Every Epson or IBM compatible printer that I have run into responds to the continuous underline command of ESC+dash+1 for *turn underline on* and ESC+dash+0 for *turn underline off.* (ESC is decimal 27.) Using these printer control codes is fast, continuous, and smooth, but not very simple. (See ASSIGN KEYS.) To turn underline on and off adds six characters in the line.These characters will count (even though they are not visible on the printed page) as the word processor decides when to stop printing at the right margin. This can screw up a perfectly good paper. To overcome this effect you would have to *add 6* to the right margin specification. However, code to change the right margin adds *three more characters* to the line so really you have to *add 9.* You also have to reset the right margin at the beginning of the next line, that is not to be underlined, which can screw up that line. And you do have turn it off at the right margin or it will start underlining at column 1 on the next line. Which means you may have to turn it back on again, and of course off again. With other word processors you may have no choice. Fortunately, there are newer word processors for other machines, and 24-pin printers that no longer have this problem.

Assign Keys

As in *Speedscript* and *TextPRO,* certain keys are assigned and you can assign nearly any others. Holding [SELECT] and typing a 1 is assigned CHR$(27). So, in the previous paragraph you would type a

[SELECT+1]–1 to turn on the underline. You can also just press the [ESCAPE] key twice for the ESC character. [SELECT+2] is assigned CHR$(14) for double-wide print. [SELECT+3] and [SELECT+4] are CHR$(15) and CHR$(18) respectively. I like to assign certain keys to the IBM special characters in the printer manual. For instance ([SELECT+Q]=172) (INVERSE CAPITAL Q) will cause a fraction 1/4 to print every time you type a [SELECT CAPITAL Q]. A little time spent with your printer manual will reward you well. Actually, all of the uppercase keys are available. Some printers may need a dip-switch set to access the IBM special characters. Some may need to first be sent an ESC 6 command.

Other Features

I've barely touched just a few topics, and many others were simply not mentioned. I have covered those that are important to me and some of the design limits that I have used. I have not discussed the user designed characters, like fractions, that print upright. Perhaps another article another time. And, of course, there is a print preview, and the false space feature. Because of the slow screen, careless editing using the [CONTROL+DELETE] can cause a problem. You may end up watching the screen deleting text you wanted to keep. If there are more than just a couple of words to delete in a looooong document, it is probably better to "Mark" and then "Wipe" [CONTROL+M] and [CONTROL+W]. A menu of up to four drives is available, as well as some DOS functions.

End Note

In my computer room, I also have a Tandy 286 Laptop. There are some of the finest word processors available installed on its hard disk. But, when I have some heavy duty word processing to do; I usually resort to my old 800 and *OmniWriter* for at least part of it. This review was started on the 800XL and finished on the 800. I usually use the Tandy, (null modem process), for spell-checking, but it is down with a bad A: disk drive.

OmniWriter is included with OmniView, which costs $29.95. For further information on OmniView, *OmniWriter*, RAMROD XL, and several great memory upgrades, contact: Newell Industries, P.O. Box 253, Wylie, TX 75098. Voice: (214) 442-6612; BBS: (214) 442-2584.

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TAX WIZARD II

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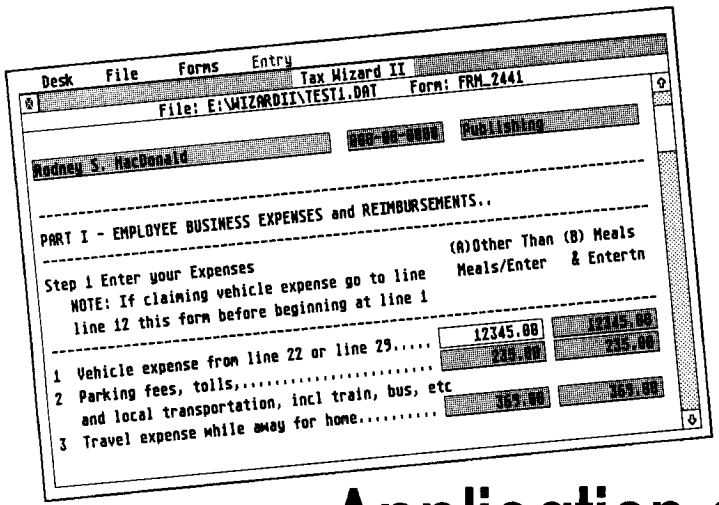

New TaxWizard II is in final testing and is being designed to provide a full GEM interface with improved forms scrolling, forms updating features, draft copy 1040 capability, and more forms (up to 40) for today's personal and small business tax returns for tax year 1992. We also will provide estimates to enable state form modules on request. Send your state forms and we will contact you. We will again have Tax Wizard II priced at $49.95 with a $10 discount to prior year registered owners. Shipping is extra and is planned for mid Jan93. Early Charge Card or check orders will not be activated until Tax Wizard II is shipped (unless you wish a 92 deduction for the program).

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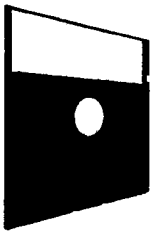

PabQwk

Version 1.1

Review by Bill Mims

There are so few people left out there supporting "our" computer. It feels great to be doing my small part to keep our machines alive. So thanks to Rick Reaser for finding me to write this review. Pab Sungenis, the author of *PabQwk* especially deserves our appreciation for taking the time to develop such a remarkable piece of software in these sparse 8-bit times.

Hardware, Software and Mindware Requirements

PabQwk is a fairly simple and easy program to run. It is hardware dependent, though. Version 1.1 only runs on a 130XE or any 800XL with more than 64K of RAM. Pab suggests using a hard drive. However, I found with a little experimenting that a stock 1050 drive can be used as long as the mail packets where one downloads are small (65K or so). As an example, my average mail packets are around 60-80K but sometimes as large as 600K. *PabQwk* works with MYDOS or SpartaDOS X (SDX). SDX works a bit faster, but I use MYDOS. You'll also need Bob Puff's *Super UNARC* to UNARC the QWK Mail packets. Sorry, SDX's "ARC X" won't work on some packets. Of course, you'll need a modem along with a terminal program, like *BobTerm* to download your mail packets. Finally, you'll need a little patience (mindware). There's a lot to set up to get the process going, but once you've figured it out, the results are well worth initial frustrations.

Preliminaries

Off-line messaging has worked out well for me. As a review, off-line messaging is a process where a Bulletin Board System (BBS) compresses all the messages from a BBS conference or message base that a user has tagged. Rather than capturing lots of messages from different conferences or message bases on the BBS while on-line, the BBS puts them all into a "QWK" packet, which I can download as a file. I can read and respond to the messages in the package "off-line." When I call the BBS again, I upload a short compressed packet that contains all my responses. The advantage to this approach is that I spend less time on the BBS and can look at the messages on my computer at my leisure. I can just walk away from my mail whenever I need to rather than being a captive to the phone line and BBS on the other end. Rebooting and coming back to read my messages later is no problem. *PabQwk 1.1* even gives me the option to "bookmark" at any time. This means I can return to that specific message later. Since I spend less time on the phone with *PabQwk*, my wife screams at me less when she wants to use the phone. So, we finally have a piece of software for better marital relations.

Before you can use *PabQwk*, you'll first need to get a copy of the program. It's available on GEnie as file #6262, **PABQWK11.ARC**. On CompuServe, you'll find it in the Telecommunications Library as **PBQK11.ARC**. If you can't get it from one of these services, give me a call and I'll send it to you. My phone and address is at the end of this article.

It is critical that you read the program documentation carefully. You might think you can muddle through *PabQwk* cold, but believe me, this program is one you can't just boot up and run.

Using PabQwk

When you first use *PabQwk*, I think you'll be pleasantly pleased. I have tried two 8-bit off-line message systems so far, and in my opinion, *PabQwk* is definitely the easier to use. *PabQwk* is written in TurboBASIC, and is really quite functional. It doesn't have all the fancy bells and whistles that a lot of people like to see and hear. But really now, that doesn't make a program, does it?

After you download your QWK mail packet from your local BBS, you'll need to UNARC it with *Super UNARC*. The QWK mail packet contains several files that will be discussed in the subsequent paragraphs.

Next, you boot up *PabQwk*. The first file *PabQwk* looks for is **CONTROL.DAT**. This file tells *PabQwk* the what, when, and how many messages of the QWK mail packet you UNARCed.

The next file *PabQwk* looks for is **MESSAGES.DAT**. This is the biggest, and sometimes the longest, file to process. While reading the file, *PabQwk* displays the number of messages in the packet. Reading it could take as short as a few seconds, or a minute, depending on the number and size of **MESSAGES.DAT**.

Next, if you are a registered user, the program looks for **TAGLINES.DAT**. This was the entire reason Pab says he wrote *PabQwk*. I think it's that Pab just wanted a little more credit under his belt! (Just joking Pab.) For those of you not familiar with them, taglines are those short little quips often seen at the end of messages on BBS systems. Sometimes they just contain the name and number of the BBS. More often than not, they contain some of the best humor around. My personal tagline file is over 200 double

density sectors, and some of them are real surprising. Again, with the registered version, this is always there. Unregistered users can't use this function.

The main menu is the heart of the system and it's pretty self-explanatory. You can read and reply to personal mail, add and drop conferences, and even do a read of just one conference. If you're like me though, you'll like reading messages. I have at least 20-30 conferences tagged on each board I use. This isn't saying you will read and reply to them all. But with this many, people will find that reading them all does take quite a bit of time. Some IBM off-line messaging systems have a scan option, where you can just pick certain messages. With *PabQwk*, when you start reading all the messages, that is exactly what it means. An option I found useful on the registered version, but don't use all the time, is the ability to read bulletins off-line. That can save a lot of on-line time with this feature. One of the best improvements I feel Pab made in version 1.1 is the ability to print messages. This feature is also only available in the registered version. (Actually, the whole right side of the main menu is only for registered users.) If you find an interesting message while reading your mail, just hit "P," and you'll get a printout of the message.

Now with just these few advantages a person would think, "Well, is there more?" Yes, there is more, but I really don't have the room here to go into it all. Besides, if I told you everything about *PabQwk* then you might not want to try it out yourself. Seriously, *PabQwk* is an excellent effort on Pab's part. Every programmer that still supports the 8-bit deserves a big thanks and encouragement to keep plugging!!

Pab also upgraded the program documentation for version 1.1 so it now includes several different hardware setups. The docs are written so that anyone can run *PabQwk*. They are very detailed and even come with a quick reference card! Different, huh? Another nice feature is that the docs tell you how to configure your local BBS to send you QWK mail. The popular QMAIL4 and MKQWK BBS QWK mail menus are fully described so you can get rolling quickly. In short, *PabQwk* is so simple to use after reading the docs that my four-year-old daughter could probably use it.

Conclusion

I run *PabQwk* on a stock 130XE with a Black Box from Computer Software Services (CSS), and a 42 meg hard drive also from CSS. I must admit that when I Beta tested versions 0.8 and 1.0, I did find bugs. But that's what Beta testers are for, right? So far, I have not had *any* problem with version 1.1 and am very happy with it. I run it every day to read and respond to my mail. Right now, at this point in time, I would not consider switching to any other off-line message system.

PabQwk is a very smooth program. With a little effort, any user should be up and running in about two hours. If you need a copy, or have a question, don't hesitate to call or write me at: Bill Mims, 120 H St Apt #1, Minot AFB, ND 58704.

Home (701) 727-4049 between 7-9 pm please, except Thursday.

If I do mail you the program, the only thing I ask in return is that you return my disk with some of your public domain or shareware files on it so I can use them. If I have them already, no big deal. And if someone needs a program Beta tested send that, too!!!

PabQwk is well worth the $10.00 registration donation that Pab requests, so please, if you use the program, do register it. Pab will even let you register if you don't send a donation. Upgrading to a registered version is quite unique. Registered users are sent special instructions to "modify" the program to activate the rest of the features. In fact, you can receive this information over GEnie, once you provide the required registration info. Pab has worked over 14 months perfecting *PabQwk*, so don't let him down! Provide a little something for his efforts!

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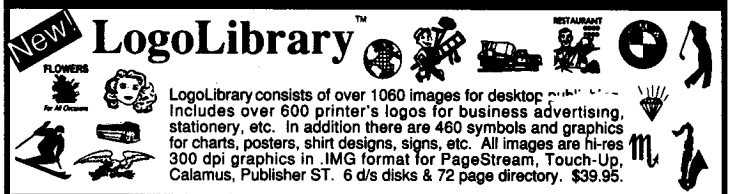

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The Universal SysOp Federation

Atari 8-bit Computer Networking Taken to New Heights

by Dennis Trowsdale

The Universal SysOp Federation (USF), is a group of dedicated Bulletin Board System (BBS) System Operators (SysOps), whose BBSs operate on the classic Atari 8-bit computer, using Orion Micro Systems', *BBS Express! Professional* and networking capable versions of *BBS Express! PRO* by K-Products. Some SysOps have upgraded to the newest HighSpeed commands recently developed by Stephen J. Carden and K-Products. If, in the future, a means of linking to other Atari or non-Atari systems is developed, we would welcome any dedicated SysOps to join USF. Our main prerequisite for joining is the love of BBS'ing and a dedication to making the USF_Network succeed through open communication with all networking SysOps. The name "USF" was chosen to break down barriers of countries, groups or even specific computer types.

The Concept

We felt it was time for a change. It was time to establish a network where SysOps could talk openly and frankly to each other about the network, in terms of its direction, its problems and its accomplishments. Within USF_Network, democracy plays an important role. Before anything new is implemented, each fully participating SysOp casts his vote, and majority rules. USF_Network is a network that promotes freedom of speech for all users. In realizing this, we knew there was a need to formulate a set of SysOp Rules and Bylaws that all SysOp's would be governed by. This, in itself, may be one of the hardest obstacles for some SysOps to overcome, but most will agree that the ends justify the means.

What Is USF_Network?

The USF_Network supports a variety of message bases, some dealing with Community and Worldwide related issues such as the environment, drug and alcohol abuse, and issues relevant to today's teenage youths. It has a Mechanics/Handymans base where we idiots with blackened fingernails can brag about our triumphs, and for that matter, our Chevys and Fords. USF_Network has bases for select computer types, ranging from Atari 8-bit's, Atari ST's, IBM's, Amiga's, Commodores along with a "For Sale" message base and a general base for all computer types. It has a message base for *BBS Express! PRO* support. There are bases on the age old debate of Politics and Religion. In other words, there is something for everyone, no matter what kind of computer you have. That certainly is a switch—an Atari 8-bit BBS network that supports message bases for those so-called "more advanced" computers.

One of the most outstanding qualities of the USF_Network is that it's networking, on average, 20 message bases within a 24-hour period. We do add or

Table 1. USF_Network BBSs

BBS Name	Area Served	Phone	SysOp Handle	Baud
RuneQuest BBS	Chicago, IL	312-728-7784	Rune Master	300-9600
The Carnival BBS	Flint, MI	313-235-0158	<:Sysop:>Sylvia	300-2400
Omni BBS	Dunnville, Ont	416-774-1038	The Lagger	300-2400
Northern Limits BBS	St. Catharines, Ont	416-937-2786	Gazunni	300-9600
System Reset!	Hamilton, Ont	416-544-3387	Sysop*Willy	300-2400
Echo BBS	Toronto, Ont	416-491-7695	Sweet Marie	1200-2400
The Jail BBS	Toronto, Ont	416-762-9316	The Warden	300-2400
The Underdog BBS	Framingham, MA	508-788-0643	Sysop*Underdog	300-2400
The Key System	San Leandro, CA	510-352-5528	Sysop*Mike	300-2400
Starlight Express	Castro Valley, CA	510-538-6340	Roadrunner	300-2400
S.N.A.C.C. BBS	Las Vegas, NV	702-438-2208	Pandemonium	300-9600
River Styx II	Chicago, IL	708-432-2659	Charon	300-19.2K
Watch City	Elgin, IL	708-931-7966	The Infinite	300-2400
Inside the 8-bit	Augusta, GA	716-798-2474	Steve Carden	300-9600
The Wall	Jacksonville, FL	904-730-8659	-Zeus-/SysOp	300-14.4K
Road To Damascus	Sacramento, CA	916-452-0518	Sysop:Tim Nabor	300-2400

Note 1: All BBSes operate 24 hrs/day except Starlight Express which operates M-F 2100-0600

Note 2: Ten nodes on the USF_Net had not provided their info at press time. We will publish that information when it becomes available.

remove message bases from time to time to accommodate user interests. This offers users a much larger selection of topics, along with reaching far more users on other systems, with most of the boards receiving new messages on a daily basis. As a rule, SysOps find that having their boards call everyday enhances their message flow contents, without really putting much more of a dent in their phone bills. Networks calling only two or three times a week will save a few pennies, but will greatly decrease the quality of the message flow. When you send a message to a user in other parts of North America, it could take up to a week, if not more, to get a reply or be lost completely if the boards aren't calling daily.

With 20+ member BBS's, it has been a real challenge to complete a continuous loop, averaging two hundred messages within a 24-hour period. If it wasn't for the dedication and communication of all the SysOp's involved, it would be virtually impossible to cope with the distances and time changes throughout Canada and the United States. We are presently looking for SysOp's with the same dedication in other parts of the world interested in becoming members of USF. This would make USF_Network not only the biggest Atari 8-bit network but the best. Table 1 is partial list of the present network members.

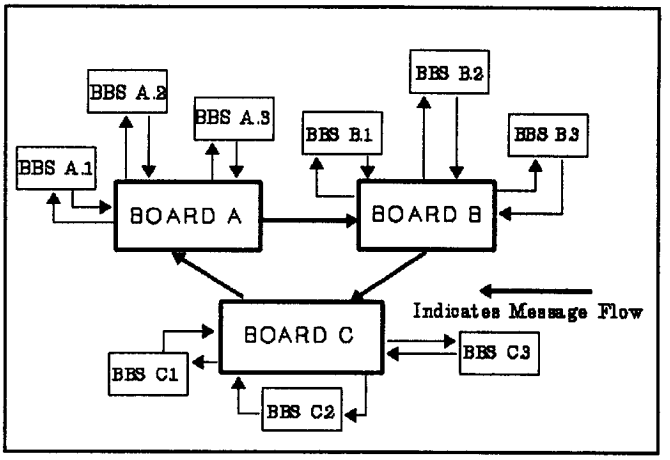


Figure 1. USF_Notional Network Schematic

If USF_Network sounds like something you'd like to join, please contact me or one of our member boards!

Forever BBSing!

Dennis Trowsdale (aka The Lagger on Omni BBS), USF_Network Co-ordinator, RR #2 Box 54, Dunnville, Ontario, Canada N1A2W2. Phone: (416) 774-1038 BBS; (416) 774-3484 Voice.

How USF_Network Works

Member BBS's set up a series of "agreed to" message bases that will be networked among all the boards in the main loop. In the main loop, each board, in turn, will call the next board in the loop and download the new messages. The new messages are then posted into the proper message bases of the downloading BBS. This continues until each board has called the next board down the line and the loop is completed. The process then repeats itself. Once the schedule is set, the process is somewhat automatic. The *BBS Express! PRO* software facilitates all this networking.

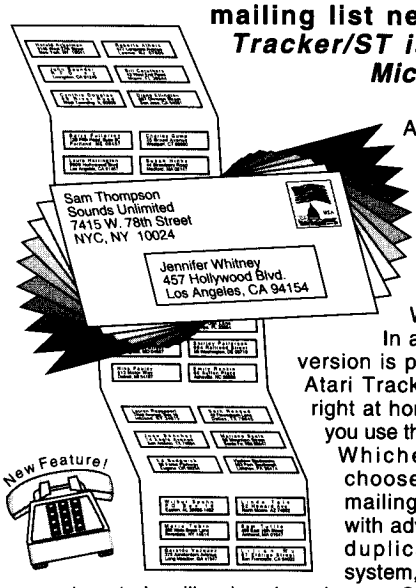
For example, as you can see in Figure 1, there is the main loop of three boards (A, B and C), plus there are a number of other boards (A.1, B.2, C.2, etc.) that are set up in sub-loops. These may be boards that network only a few of the message bases, and cannot be inserted into the main loop, because all the messages do not flow through them. Any boards networking all message bases will be set up in sub-loops until it is sure that the network's integrity isn't jeopardized. After this trial period, they are incorporated into the main loop. I hope this gives everyone an understanding of how USF_Network works.

Summary

Networking is the best thing to ever happen to the BBS community. It provides users an excellent opportunity to converse with people all over the world without leaving their homes!

Tracker/ST & *NEW* Windows Tracker/ST

From a musk ox farm in Alaska to a world-famous band from New Orleans, thousands of Atari owners use Tracker/ST for all of their mailing list needs. *And now, Tracker/ST is available for Microsoft Windows as well!*



Answering requests from many of our registered users, we have created a fully compatible Windows Tracker/ST. Users can import and export files between Atari and Windows Tracker/ST. In addition, the Windows version is practically identical to Atari Tracker/ST, so you'll feel right at home from the first time you use the program.

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Space Guns in the West

Another World—Another Reality

by Frank F Sommers

Darth Vador Returns

The guy in the yellow jacket jumps down the stairs, moves toward the post, then turns and blasts the man in blue. A direct hit and blue pieces of the victim burst up everywhere. One kill, and more to come. Then somebody, something blows our hero in yellow away. And he becomes a statistic on the man in red's score card.

The combat arena is multi—leveled, with columns and stairs, taking you up a floor or down, wherever, as you twist and turn in your many colored environment so that you can spot a new victim, or guard against a shot in the back.

A World of Difference

But what's so different? Another computer blast'em game with four or five guys running around attempting to score by destroying each other.

Not quite. This is "Virtual Reality" and one of the guys seen by observers on the large video screens placed strategically around the small room is you. You? Yes, you! You are part of the game, not just playing it with a mouse or a joystick. As your body turns, so does the body on the TV screen. But you're not watching any screen. You are there. You push forward and you move forward and up the stairs or over the side of the ramp, jumping down to one below, and twisting to be sure no one plugs you as you land. This is real. The clock is ticking and somebody will end up the hero, and somebody the big loser.

Then the Unexpected

But damn it! What's happening now. You're being pulled up off the floor. Something has grabbed you and is lifting you into the air. Something green above you. Of course, a pterodactyl. You were covering yourself on all four sides, but oops ... not also watching what's been released into a disintegrator cauldron. And your "kill" score drops by one.

Now Tell the Truth

Where are you really? Out West! In an arcade in Boulder, Colorado, standing on a circular shiny black pod several feet off the ground with a half—foot round plastic girder encircling you waste—high. Your head is covered with a cybernetic—type helmet and visor. Over each of your shoulders hangs a thick rubber—shielded cable. One connects to a computer box mounted at the back of the platform; the other connects to your holster and space gun. Your helmet is yellow. So you are the man in yellow in the arena. Three other platform structures, with individuals similarly adorned, except for helmet color, fill up the rest of the room. This is the Virtual Reality Arcade that has just opened with its new reality pods imported from England.

Draw Your Weapons!

The referee instructs all four of you to draw your disintegrator guns, and then counts down to zero and wham—0, you're off to VR land. Your eyes peer through the visor as you become part of the arena. If you turn your body right, the man in yellow turns right inside the arena. Press the motion button on your gun and he (you) moves forward. Stop, turn around! There's the guy in blue. Fire! Fire! A small blaster bomb lobs out of your gun and blows the blue invader to kingdom come. Or it lands to his right and he lets colored daylight rip you apart. The kill or be killed challenge continues as you gain another life.

After five minutes it ends. And one of you is the hero with the most kills and one the loser with the least. You take off your helmet, lifting it carefully off your shoulders and hanging it in front of you. Gingerly you lift the circular bar and duck under and out and step down. Your first visit to the world of Virtual Reality is over.

It's There and You're There, Too

This reality event is quite different from what you are used to on your ST, no matter how involved you have, in the past, become with your favorite game. There is a definite sense of being there as you and your paraphernalia and gun and the man in the yellow shirt become one. The scenery is bright and colorful, a bit blocky but better than most of the earlier computer games. But remember, you're inside it, not just watching it on a screen.

A Whale of an Investment

It's not inexpensive. The pods with their glistening futuristic styling and electronics cost $100,000 each. That means they have to charge a bit more than a quarter a game to recover their investment. In fact, your five minutes costs $4, and you wonder how many young gamers lined up outside the door onto the street can afford a morning at Virtual Reality, playing 5 or 10 games, as they perfect their killing skills.

There's almost a half a million dollars tied up here. You wonder how they can ever recover their investment. Say the demand is constant; which it won't be during weekdays, and you can schedule 10 plays per pod per hour. In an eight—hour day with four pods, well, you figure it out; at $4 times 320 plays you're over $1000 a day. In a year then you might get more than half of your investment back, that is, if the crowd continues.

But who cares about reality when you are part of the ultimate, the virtually unequaled stuff?

CompuServe ST
Staying in Touch
by Michael D. Mortilla

You've Got the Whole World in Your Hands

"Once the realization is accepted that even between the closest human beings infinite distances exist, a wonderful living side by side can grow up, if they succeed in loving the distance between them which makes it possible for each to see the other whole against the sky."

Ranier Maria Rilke (1875-1926)

So Far Away

How far is it to Japan from where you are at this moment? How far to New York, L.A. or Ann Arbor? Are they the same distance or is one further than another? How about information? How far do you have to go to find the current weather report in St. Charles; the real price you should be paying for a new Lexus or the relative mass of Jupiter? And what can you do when it's 3:00 a.m. and you just have to talk to someone?

The answers to these questions need be no further than your telephone jack and your computer keyboard. Hiding under that plastic cover of your computer are all these things and much more. Through online services, you are given a window to the world and beyond, with more information available to you than most can process in a lifetime. From medical information, to poetry writing, music, MIDI, the latest news, or just plain chat, online services can bring the world to your computer screen and at a cost which can be quite affordable.

The Phone Bones' Connected to the Modem Bone

Before we start discussing these services, let's take a quick look at what you'll need to actually call these monster mainframes and access their data and members. First you'll need a computer. We guess that if your reading this, you've got one of those. Probably an Atari or two.

Next you'll need a modem. Prices have *really* dropped over the past few years. For arguments sake, let's assume your using an Atari ST. Just about any IBM or PC compatible modem will do. You'll be able to find them in various speeds called *Baud Rate*. A basic modem of 1200 Baud might cost you a whopping $25 bucks second hand. A 2400 Baud "pocket sized" modem might run $125 new, and for a couple of hundred bucks, you can grab a 9600 Baud modem with the ability to send and receive a fax as well! I would suggest a 2400 baud or, at least, 1200 Baud to start. You could go with a very inexpensive 300 Baud, but if you really get going on this telecomputing thing, (and if you try it you will) you'll want at least the 2400 Baud rate.

If I Could Talk to the Animals

So, you've got the modem. You didn't forget the modem cable, did you? Now the next thing you'll need is a terminal program to tell your modem whom to call and how to "talk" to them. There are a number of ways to go, and many programs will automate much of your activity, from dialing a service and logging on, to downloading files (programs, texts, etc.), to collecting and answering your electronic mail, which is known as E-Mail.

For the Atari ST line, there seems to be two programs which are very popular; *Flash* and *Interlink* (see your dealer or call for mail order). These programs are very inexpensive. When I bought *Interlink* about four years ago, I paid a grand total of $35. I've seen the same program listed in ads for as little as $25 in the recent past and second hand for as little as $5. There are other alternatives. If you have a friend who is already on one of the services, you might ask him to "download" a public domain, freeware or shareware program. One such program is the *Freeze Dried Terminal* available on CompuServe or in the CN Library (#735). Again, if I may make a suggestion, go with a commercial program to start. They are inexpensive and *very* easy to set-up and use. Just follow the manual that comes with the program and you should be online in very short order.

Operator? Won't You Help Me Place This Call?

So who you gonna' call? Well, that's up to you, but there are a large number of services vying for your affections and there's nothing stopping you from trying them all. There are even "free" bulletin board services (known as BBSs) available to you and if you're close to a university, you might even be permitted to access their library and, through the magic of computers, connect to NASA, the Aquarium in Boston or the Smithsonian! In the back of the manual that comes with your terminal program there is a good chance you'll find a list of available services you can log on to right off the bat. Most will let you tour the service free

and decide if you want to actually pay for it. And if you bought your modem and terminal program new, and still in its shrink wrap, there is a very good chance that you received a coupon for free online time worth between $15 and $50 dollars.

If you check your local computer or book store, you may well find a CompuServe introduction kit with free online time included with a book telling you all about the service and how to log on. The cost of the purchase is more than made up for when you use the online coupon. And if you have a friend on CompuServe, have them find out about the member referral options.

Eneey Meeny Mineey Moe

The big names in the online service industry are CompuServe, Delphi, Prodigy, and Genie. There are others that specialize in a particular area or business, like PAN, the Performing Artist Network, but the first four I mentioned are the general interest services. All are professionally maintained and all seem to offer exceptional service in one way or the other. Which you choose is totally up to you.

Now when I say "general interest" I don't mean to mislead you. While the services cover a wide area of interest, within the individual areas on the service, *very* specific items and issues are discussed. I have been on all the major services and my final choice has been CompuServe. I won't go into why I made that particular choice, except to say that I felt more comfortable with how the service worked. I found it easier to "navigate" around CompuServe (also known as CIS) and retrace the steps I took to locate a particular area, message base, etc. It was also easy to locate new areas of interest. The general focus of this column will be on CompuServe, but not necessarily limited to that service or telecomputing.

You've Got to Have Friends

The many areas on CIS are divided into "Forums." Of immediate interest to the newcomer/ST user are the Atari Forums. Because of the way CIS has structured *their* software, the forums are broken up into several separate forums. These include the productivity forum (ATARIPRO), arts forum (ATARIARTS), and the vendors area (ATARIVEND). Once you're online, getting to these forums is accomplished by typing either GO and the forum name at the command prompt or FIND and the subject you want to find. These are perhaps your most powerful words on CIS: GO and FIND.

For example, say you logged on to CIS and you have read all the introductory announcements about new forums, contests, etc. At some point your screen will show something that looks like this:

Press ‹CR›!

That is called the "command prompt." It wants you to either tell it what to do or press the [Return] key on your computer. If you chose the latter, it will provide you with a choice and/or menu. Command prompts can also say a number of other things, but they always end with an exclamation mark (!). If, at the command prompt, you type in GO ATARIPRO (capital letters are optional), then you will be quickly escorted to the Atari Productivity Forum. You will be asked to join. It doesn't cost anything to join a forum on CIS, just the online time charges if appropriate, but if you don't join, your activities will be limited. Once you join, you can immediately search messages, reply to them, check out the software libraries and even download a few files! You'll find thousands of programs and "how to" files (like how to expand that SM124 monitor screen to it's borders), and a wide selection of other useful things. How about a program to plot your astrological chart? It's in there. A new RAM disk or a calendar printer? No problem!

If Ever I Would Leave You

When you want to leave (you *never* outwear your welcome in these forums), you simply type GO ATARIARTS or whatever, and you'll be whisked to a new area filled with its own particular brand of people and files. Frequently. you'll find the same people "lurking" in several areas and you start to get to know people personally. Really! You can even chat online or hold an impromptu conference, but we'll save those items for another article.

But let's say you don't want to hang around the Atari forums and want to find out why your new puppy just left his dinner on the rug under the sofa. At the command prompt, type FIND PETS and you'll be whisked to a menu of forums and areas related to your request. You could just as easily have typed FIND CAMERAS, FIND JOURNALISM, FIND RECIPES, or FIND SEX. Yes, there is even a sexuality forum on CIS that will answer your questions or let you download files on a number of issues. I haven't been in the SEX forum for as long as I can remember (pun intended), but as I recall, it was run by a couple of psychologists who happened to be married. Don't quote me on this, but if you really want to know, you can always drop a note to the SYSOP. No, that's not the one eyed beast from "Sinbad" but an acronym for SYStem OPerator. SYSOPs oversee the forums, resolve problems, check uploads and such tasks. They are usually the first ones to leave you E-mail welcoming you to that area.

Hit the Road, Jack

When you feel you've had enough online time, simply type OFF at the command prompt and CIS will thank you for using their service and disconnect your call and suspend charging you. It's really that simple.

So what's all this online time going to cost? Well, if you opt for the basic service, it's something like $7.95 a month on CIS for unlimited time in certain ar-

eas. Check with CIS for the latest areas included and pricing. Their number is (800) 848-8990. Beyond the basic service, you'll be paying about $12/hour for the premium areas, but don't waste your money practicing how to use the service. GO PRACTICE at the command prompt and charges will be suspended while you're in the practice area where you will be "taught" all you need to know about navigating on CIS.

In future articles we'll deal with such issues as how to upload and download files. You get online credit for uploading, or sending files for others to use, thereby reducing or eliminating your online charges! We'll also discuss how to ARC, deARC, LZH or un-LZH, freeze or unfreeze, that is, files; how to chat online; join a conference; talk on the CB simulator in real time with folks from around the globe; and how to make your feelings known in a message. Want to smile in the middle of a sentence? Type :) or :› or :] and so on. Want to grin? Type ‹g› Sad? :(Angry? ;(Get the idea? Be creative. Develope your own style and ASCII picture vocabulary!

But for now, let's concentrate on getting you online. When you do make it online, feel free to drop me a note. Either leave a message in any Atari Forum or in my E-mail box. My CIS ID# is: 72401,1765.

One final word. While it would seem that telecomputing is a cold, clinical, impersonal and non-human way to communicate, that fact is that online discussions are anything but cold and impersonal! Everything from romance to all out war and *everything* in between can be had online. Victor Borge, the pianist/comedian once said: "The shortest distance between two people is a smile." How nice that we can smile, er... :) at people across the country, across an ocean or across the street and do it from our modest little computer. We can, and *do* make friends online. We can also reach millions of people, literally, through the online services. That is far from my wildest dreams of what I thought a few hundred dollars worth of hardware and software could do. There is a new world opening up and it's easy to be a part of it. It's exciting, it's fun and it's waiting for you to join in! Who knows? Maybe you'll be a SYSOP of your own forum or find a new and exciting career or hobby online. The possibilities are only limited by what you want to accomplish.

Thanks for listening. See you online! :) ‹g›

[Michael Mortilla is a professional composer of music for film, theatre, and modern dance. He has scored over a dozen films, including The Chaplin Mutuals. He teaches at a major university in southern California and has worked extensively with the modern dance pioneer, Martha Graham. Michael also writes for ZNET, available in the Atariarts forum on Compuserve. He uses an 1040STf and a STacy and has no idea where he finds the time to write words for magazines.]

Don't Be A Solitary Atari.

The largest and longest standing group of Atari® users in the world shares its problems and solutions online every day in CompuServe's Atari Forums. And you can join them.

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To join CompuServe, see your computer dealer. To order direct or for more information, call 800 848-8199. In Ohio and Canada, call 614 457-0802. If you're already a member, type GO ATARI at any ! prompt.

CompuServe®

by Lou Rocha

Welcome to the second installment of GEnie Notes. In this month's column you can find the latest news about the Falcon and related software; check out Darlah's Treat and the ST library thanks to Larry Duke; voyage over to the Science Fiction RT for a peek; and review the highlights of recent Real Time Conferences with Brian Harvey. All aboard!

Dateline Atari! with Bob Brodie

Atari's Director of Communications, Bob Brodie, holds a monthly conference on GEnie. Dateline Atari! airs at 10:00 p.m. EST on the first Friday of each month. Bob meets Atarians live and discusses the latest hardware and software developments for all Atari computers.

In the Feb. 5th RTC, Bob brought us up to date on Falcon production, reporting that Q/A checks were showing less than 0.5% defect rate. Bob also indicated that Falcon shipping would take place by March, 1993.

On the software front, there was lots of news about *MultiTOS*, *SpeedoGDOS* and *Atari Works*—the integrated wordprocessor, database and spreadsheet. *MultiTOS* will be installed on all Falcons and will also be distributed to the current users, although the means has not yet been determined. As for *SpeedoGDOS* and *Atari Works*, I can tell you firsthand that the software is ready and works beautifully. Without getting into a full review, let me tell you that I am so pleased with *AW*, I have started using it as my primary wordprocessor. The laser output of the *SpeedoGDOS* fonts is outstanding!

At this time, the only remaining question is whether the manuals will be ready for the first mass shipping of the Falcon030. By the way, *Atari Works* and *SpeedoGDOS* work on the ST, STe and TT computers! Current speculation is that Atari will sell the *AW* package for approximately $120. Start placing advance orders with your favorite dealer today!

Darlah's Treat

At press time there were two interesting demos available as free downloads: CAL3DEMO.TOS and TWS2.ZIP. *Calligrapher 3* from CodeHead Technologies is an excellent document processor that uses URW outline fonts. John Eidsvoog and Charles Johnson support *Calligrapher 3* on GEnie and have uploaded a number of font sample files, specifically designed for various printers, so that prospective buyers may check print quality before purchase.

TWS2.ZIP, comes from the young programming team of Sean Dougherty and Tim Miller under the commercial name of *TWS* (Two Worlds Software). Their demo file includes *DigiPlay* and *ANSITerm*. *DigiPlay* is a sound file player for various formats (VOC, SND, SPL, AMI, and more). *ANSITerm* is a slick terminal program that provides good 16-color ANSI emulation in 80-column display. Also included are X, Y, Zmodem, Ymodem-G and Batch file transfer protocols. Tim and Sean are also available on GEnie to support their products and regularly attend the Real Time Conferences to chat with their users.

The next Treat will be a demo of *Cyberdrome 1.1–The Hoverjet Simulator* by Rhea-FX. It is a fully functional demo that also supports two-player mode or one-player practice mode. Other fine products from Fair Dinkum Technologies include *Crossword Creator II* and *Word Search Creator*. Demos of both programs are also available in the ST Library.

Darlah's Treat is always a free download on Page 475 of the ST RT during non-Prime time. Log on and get a free demo from one of your favorite developers!

The Science Fiction RT

by James D. Macdonald

The Science Fiction and Fantasy RoundTable is one of the biggest RoundTables on GEnie—so big that it's divided into three smaller RTs. The boards support people with an interest in science fiction, fantasy and horror. The main divisions between the three bulletin boards are, basically, written, visual, and fandom.

We have literally hundreds of published authors, professional editors, filmwriters and effects people, actors, and others who create science fiction reading and posting in the SFRT, while thousands more join in the discussions. The latest information about the SF world—from next month's books to next year's conventions—is available, while lively debate rages about all the arcane topics that interest SF fans.

The SFRT is a GEnie*Basic service; your monthly $4.95 GEnie fee allows you almost unlimited non-Prime access in the bulletin boards. In addition to the bulletin boards, the SFRT has formal and informal Real Time Conferences every night, with guests ranging from Anne McCaffrey (author of the Pern books) to George Takei (Star Trek's Mr. Sulu). Live action fighting with medieval weapons is another attraction for those who wish to enter the RTC rooms. Others enjoy relaxing with their friends.

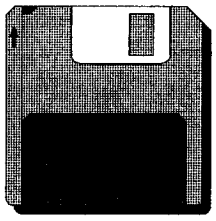
Some of the major areas in the fandom area include Pern, Star Wars, and Heralds of Valdemar. Star Trek (the original series, the Next Generation, and Deep Space Nine) is represented by numerous categories and topics.

There are group-written stories, both public and private, and a writers' workshop for those who wish to improve their skills as authors. Private areas for Science Fiction and Fantasy Writers of America, Horror Writers of America, and the Science Fiction Research Association round out the blend.

So come to the SFRT on GEnie—the Science Fiction convention that never ends.

GEnie ST Libraries

by Larry D. Duke



In the previous article, we had a quick look at each of the libraries in the ST RoundTable, their archiving techniques, and some of the extraction utilities. Now, let's take a look at some support files (picture viewers, sound players, etc.).

The ST has always been a great graphics platform. To prove that Atari users are prolific in their graphics, there are more than 2,100 graphic files in the library in many different formats. To view them you'll need these or similar picture viewers:

GEMVIEW 2.13-File #27392 This is an all-resolution, GEM-based program that will allow you to view almost every type of graphics file available in the libraries. .GIF, .JPG, .PCX, .SPC, SPU, .DOO, .IMG and many more file types are supported. Shareware from Dieter Fiebolkorn.

TLCSHOW 3-File #27533 An exceptional shareware Spectrum viewer from Tom Hayslett.

SPSLIDEX-File #11425 SPECTRUM 512 file viewer, with an additional capability to "smoosh" these files into .SPS configuration. .SPS files are somewhat smaller, with improved internal data compression.

DMJ_GIF 3.0-File #21573 Another exceptional shareware program from Damien M. Jones. This program allows you to view the many .GIF files available in the ST and other RoundTables on GEnie.

PCS VIEWER 3.0-File #26980 The newest ST/STe picture format is .PCS, which makes your computer do things you'd never expected. Exceed the designed limits of color and view thousands of colors on screen at once (STe). This file is necessary if you want to view these pictures.

There are also numerous file converters available in the Library. Most of these files are in Library #28 - Graphics Programs and Utilities.

Digitized sounds turn your computer into a parrot-mimicking the sounds that others have recorded. There are over 425 digitized sounds available in Library #17.

To play these sounds you need to be able to convert the digitized sounds stored on the disk to the analog signals of the speaker. A few of the files that do this are:

SOUNDLAB 1.04-File #26794 A great all-around sound player by Damien M. Jones. This one is TT compatible, plays both DMA samples and other types available in the library. It's very flexible, allowing you to add special effects and resave the sample. Shareware.

DMA SOUND 1.2-File #27286 Another shareware sampler to play DMA sounds for the STe/TT/Falcon. If you don't have DMA sound capabilities, this one isn't for you.

WAVE PLAYER-File #26868 Play sounds recorded for WINDOWS in the MS/DOS world. With this program, a wide array of sounds await in the WINDOW RT or the IBM-PC RT on GEnie.

PAULA 2.0D-File #26336 The AMIGA computer uses a special file for recorded music called .MOD. *PAULA* works as a desk acc to play these recorded concerts. Since it's an accessory, you can start the music and continue with your work, serenaded by awesome sounds. STe/TT ONLY!

There are so many more sound players available that it would take a very long time to name them, much less any information about the programs. MIDI players, *Music Construction Set* and *Music Studio* format players and more are in the library. Check out the Music Programs and Sound Utilities Library (#29) for more selection.

The Utilities library (#2) contains so many files, it's hard to pick out just a few for this article. Utilities are the programs that make your computer operations easier, patch Operating System "undocumented features" or manipulate files and memory. Some of my personal favorites include:

FOLDRXXX-File #3632 The operating system reserves memory for 40 directories. If you aren't using the latest version of ICD Hard Drive Utilities, you'll want this file (ICD includes similar coding within their booter). Run it from your AUTO folder and determine how many folders you'll be needing, then rename the file to FOLDR100.PRG for 100 new folders, or FOLDR500.PRG for 500, etc. It's a nice fix to an occasional problem hard drive users may experience.

MEMFILE 3.0-File #18118 Shareware from Rick Flashman. This is a memory, file, and disk editor. It will search your drive, your RAM, or any specific file for a string of characters or hexidecimal number, then allow you to edit. Great for changing some programs that ALWAYS look to drive A to now look in your hard drive.

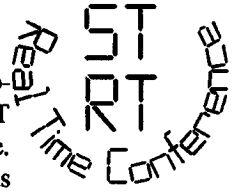
DESK MANAGER 3.3-File #15172 Shareware from Charles Johnson. Allows you to select among various AUTO programs, desk accessories, and desktops when loading your current session. Easy to use, and very flexible. A TT version called PRE-EDIT is also available.

SUPER BOOT 8.0-File #26737 As an alternative to Desk Manager, this is a similar program to the above. Quite flexible, easy to use and set up. Shareware from G. W. Moore. A great utility!

I haven't even scratched the surface of some of the better files in the Library. Hopefully, we'll be able to continue next issue with some of the exceptional games available in Library #8.

Round Table Conferences

by Brian Harvey



For the latest news from developers you must attend the Atari ST RoundTable Conferences on GEnie. The number of weekly RTC's has grown over the past year. We have a Help Desk every Sunday night, a Desktop Publishing RTC on Mondays and the usual Open House RTC on Wednesday. A monthly Dateline Atari with guest Bob Brodie, the Head of Communications for Atari supplements this busy schedule.

Formal conferences with a guest speaker are recorded and uploaded to the library for those that couldn't make it to

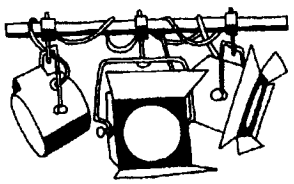
the conference. The transcripts are usually reprinted in the online magazines.

Who have we had as guests? Think of an Atari developer or Atari Corp. personality and they have probably appeared online! At least 50 RTC transcripts were uploaded to the library in the past year. The CodeHeads had three RTC's and Bob Brodie attended six conferences. We have had Gribnif, Oregon Research Associates, WizWorks, Fast Tech, Lexicor, Missionware, Wintertree and others. We also had live conferences from all the major shows and appearances by both Leonard and Sam Tramiel. In fact, on any regular conference night you are likely to find Bob Brodie popping in during the last hour and giving us some good news!

The recent Independent Association of Atari Developers RTC gave everyone a better understanding of what development means on the Atari platform. D.A. Brumleve and other developers gave words of wisdom to hopeful new developers. This conference consisted of the largest gathering of Atari developers ever on GEnie! A very busy but enjoyable time.

Upcoming RTC's in the next few months will include the CodeHeads, Missionware (concerning updates for *FLASH II*) and Oregon Research Associates (regarding *DIAMOND BACK III*). Stay tuned for more information.

Developer Spotlight



Dorothy Brumleve (KIDPRGS) is one of the many respected developers in the Atari community. Her specialty is Educational Software. Dorothy is also the current President of the Independent Association of Atari Developers and is working hard with her colleagues to improve the fortunes of Atarians.

1985 found us teaching our then 7-year-old son at home. I had scrounged garage sales to equip his classroom with all sorts of wonderful books and devices. My husband, a research chemist, insisted that no classroom was complete without a computer. He had settled on a Mac when an ad in Scientific American caught his eye. It turned out he could have the equivalent of a color Mac-which wasn't available at any price anywhere-for less than the Mac he'd planned to buy. He justified the expense by pointing out that I could use the computer for word processing. I had an IBM Selectric typewriter and I felt very strongly that a computer would be a waste of money. He went out and bought a 520ST anyway.

Our son loved it! He became proficient with several programs right away. It wasn't long before the boy was teaching me to draw with *Degas*, and I discovered that I was a fair computer artist, even though I hadn't ever been able to draw before. I spent hour after hour drawing and otherwise monopolizing the family's computer. It was clear that we needed another one, so we then purchased a 1040ST.

When he was eight, the boy decided to learn to program. My husband was already proficient in several programming languages, but he had little time to devote to teaching, so I undertook the task. As I envisioned it, I would learn just a little bit ahead of our son and then teach him what I knew. The reality was, we both dove in head first. We each became so absorbed in our own programming efforts that we spent little time interacting - except to show off our work. He taught himself, I taught myself, and we both became real programmers.

Around this time (1987), our younger children, who were hanging around watching us use our computers, began to express a desire to use the computers themselves. Their brother had used software designed for adults, but our younger children found these programs too complicated. Even if the task was within their grasp, the interface was not. They couldn't read, they were confused by the proliferation of options; using the keyboard was a slow and tedious chore. Within a month of writing my first PRINT command, I was trying to address their need for appropriate software with my own programming efforts.

It so happened that a friend (who was also the teacher of some of these children), Michael Marks, was hoping to provide a computer center in his classroom. He had some definite ideas about the qualities of the software he would use to augment his preschool program. When he saw my earliest efforts, like *KidPiano* and *KidMusic*, he suggested some other paths I might follow. *KidGrid* was our first collaborative effort, and he has influenced (if not conceived) every program I've written for children since then.

I have released nearly two dozen freely-distributed kidprgs, and now I also have a commercial line of more extensive programs. These include *Super Kidgrid, Kidpainter, Kidpublisher Professional, Multiplay*, and the *Creative Discovery Packet* (a collection of 11 programs especially designed for use in Early Childhood classrooms). The programs are available from most Atari dealers and directly from D.A. Brumleve, P.O. Box 4195, Urbana, IL 61820-8820 (217–337–1937).

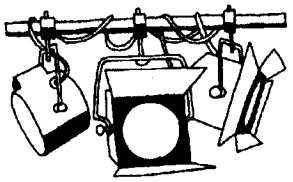
Beginning with that first 520ST, Atari computers have taken over-and enhanced-the lives of all members of the family, and mine in particular. I am currently the Secretary of the Champaign-Urbana ST Users Group and edit our monthly meeting announcement. My husband and I provide technical support and service as volunteers to help two local schools and the public library make the most of their STs. I've written articles for nearly every North American Atari magazine past and present and even for a few abroad. I am currently serving as President of the Independent Association of Atari Developers, a group which represents some 60 third-party commercial hardware and software developers supporting Atari machines.

In our household (or "in-house" as we professionals say), we have examples of nearly every ST-family computer Atari has produced, but my favorite remains my 4MB MegaST purchased on a glorious weekend-without-the-kids in Chicago back in 1988. I've added color and mono monitors, a Monitor Master, a Golden Image Optical Mouse (not to be confused with the opto-mechanical version), a TOAD-File 44MB removable drive, an 85MB Supra hard disk, a double-sided external drive, a ZOOM modem, an Atari

SLM804 laser printer, and my old standby, the original HP Deskjet printer. I use all this stuff nearly every day for all sorts of things that I used to manage to do without it! I publish my church newsletter, my user group meeting announcement, a local school's annual student directory; *Calamus* has improved the reception of these documents one hundredfold. I write letters nearly every day to friends, relatives, and customers (yes, I still use and enjoy *1st Word Plus*). I program primarily in GFA. Recently, I've written several short programs for Mr. Marks' classroom; some of these may be expanded for commercial sale or gathered into a second Creative Discovery Packet. I enjoy online activity tremendously, so I often "attend" conferences and post messages on the bulletin boards. My IAAD activities bring me to GEnie each and every day to assist my fellow developers (and get assistance from them as well).

It's really the perfect activity for me. Online, I can meet people and socialize without dressing up or leaving the house (two things I hate to do). One of the greatest personal outcomes of my computing activities has been meeting many of the very wonderful people in the Atari community. Online acquaintances and computer pen-pals have become real friends, as I meet them repeatedly at computer shows. I thoroughly enjoy every computing activity except for spreadsheet work, and, given enough experience, I may become comfortable with that as well.

User Spotlight



Joey Sherman [REALM] is one of those long-time Atari users who dabbles a little in programming among his other interests. Joey also uses Atari products in his place of business.

I'll be 26 this month. All I've wanted to do since I was real little is make things, take things apart, or fix things. That's pretty much my entire hobby, way of living, whatever. I live on a farm and work at a large sheet metal fabrication shop. There we actually have a Mega 4 ST with a T20 from Fast Tech, one of the first TT's and a second TT we bought just a couple of weeks ago. We use them mainly with *DynaCADD*. In fact, we have a Computer Plasm torch due in this week. I've been working a little more then usual to get every thing set up and pay my bills, of course.

At about 11 or 12 years old, I started with a TRS-80 with a whopping 4K and cassette drive. Then I bought a 1200XL with an 810 disk drive when they came out. Oh... that was after upgrading the TRS-80 to 16K. After the 1200XL, I went to the 520ST with no TOS in ROM, then the 1040, then the Mega 4ST, then the Mega STe, and now I've got an 8 MB TT with Matrix Card. Along the way I picked up a Canon Scanner, an SLM804, a Studio File 44 MB Removable that started out being an Atari 44 MB unit I won in the Outline contest. Slowly it fell apart until now none of it's left.

I was using *DynaCADD* about 12 hours a day until I started programming. Now I only use it when I need to get paid. Mostly I've been using GFA Basic to write software. It seems to be a fairly easy language to use. Supposedly you can't write professional quality programs with it, but I'm working on proving that incorrect. I wanted something that would let me concentrate on the computer and not the language. I've also got *Calamus* and *SL*, which is great; but, unfortunately, I haven't had the time to use *SL* much yet. I also use *Outline* on occasion. I still use *WordWriter* for writing letters and *Aladdin* is used a LOT! I use GEnie mostly as a break between jobs.

REALM was founded some time back as an outlet for making things. Software seems to be a fairly inexpensive item to handle. It just requires time in advance but no money. Recently I released *Pixel Grabber* and have since finished *Alvin* (a measurement converter). I wrote *Alvin* to use at work and I don't feel it's a professional quality program yet. Possibly *Alvin 2* will be sold for money. Right now I'm selling everything direct because I don't feel I've learned enough yet to write a professional quality program. The programs I've written so far are small and really don't deserve a $39 or $49 price tag. Selling direct I can actually make more money per item while at the same time charging the user only a small fee. I am considering packaging several of these smaller programs together into a single commercial product. I'm more interested in the product than the money. If I wanted real money, I'd work full time at Vendome!

GEnie is probably the best thing I've come across for support. The amount of information you can find on GEnie is just overwhelming. If you have anything you want to know, you can just ask in the appropriate topic and someone will tell you exactly what to do. Not only that, but I really like being able to answer other people's questions when they get stuck. Then, of course, you have direct support from other software companies like DMC and Ditek. It's like having 24–hour support!

I love the Lexicor stuff, use it all the time! *Phoenix* is on my must have list. I use it and *Cybersculpt* to make things for *Calamus*. You can map marble onto just flat 3D objects and get nice marble textures for outline. Or you can use the ACC to convert *Calamus* fonts to 3D files then add texture to those as well.

I currently use only the Atari RT due to the fact I don't have time to do much else. I'd rather fully participate in one area then spread myself thin. I do occasionally grab some GIF files out of other RT Libraries. There are some good ones out there!

REALM

Well, that brings us to the end of this month's column. Next month we will have a little primer on navigating GEnie and participating in the Real Time Conferences. I also promise to bring you the latest Falcon news, fresh from Bob Brodie's next GEnie conference on March 5th. If you have a question about the ST RoundTable on GEnie, or if you are interested in a specific GEnie service, please send your letters to Joe Waters or send me some email on GEnie to ST.LOU. 'Til next time....

by J. Andrzej Wrotniak

What You See Is What You Get ... Not!

More on *GDOS* and *Publisher 2 ST*

(Plus unrelated ravings on Gemulator and Cheap Mac)

Last month I described how to install extra GDOS fonts so that they work with *Publisher 2 ST.* After the issue had been printed, I noticed that *Calamus*, used by our Joe Waters for putting *Current Notes* together, somehow knew that the article was about a competing product and protested it by mangling the final output: whenever a word was hyphenated, the hyphen was replaced with the letter preceding it, to an effect equally comical as annoying.

Really, there were three possible explanations: either (1) Joe went through the whole text, laboriously replacing every hyphen with something else, or (2) there is a bug in the program, or (3) *Calamus* demonstrates intelligent behavior.

The first possibility seems unlikely, the second one seems too trivial and so I am bracing myself for what may happen with this month's column.

Publisher 2 Update

Some of our Readers have been asking how to contact ABC Solutions of Canada, the North American distributors of *Publisher 2* (and of other ST software). Their address is: ABC Solutions, 4040 Credit View Rd., Unit 11-151, Mississauga, Ontario L5C 3Y8. They also can be reached by phone: (416)824-8484 (if you are lucky; you may not be cut off by their crazy fax machine) or on GEnie as ABC.SOLN. ABC Solutions is offering reasonably priced upgrades to the newest version; contact them for exact terms.

Timeworks *Publish It* for PC now in Version 3.0

Those of us who use the ST at home and a PC-clone at work may be happy to know that Timeworks is still distributing *Publish It*, a PC-DOS clone of the program, with the newest Version 3.0 recently available. I upgraded to this new version last December for $50 and, yes, I am quite pleased with it.

The good news is that *Publish It 3.0* has scalable outline fonts (with a dozen or so included with the program), more import capabilities, new special effects for handling text (stretching, distorting, arranging in a pattern) and an improved user interface, still familiar for GEM users, but with more widgets and good use of the VGA color. A major improvement is a built-in Merriam-Webster spelling checker.

The not-so-good news is that both screen and printer output is noticeably slower than in Version 2 (this is the price you usually pay for font scaling) and, more importantly, that the file standard is only upward-compatible with the ST version. This means that *Publish It 3.0* on the PC will read files from *Publisher 2 ST*, but not vice versa.

Generally, I find *Publish It 3.0* is a significantly better program than Version 2, and I have used it heavily in the last six weeks or so. It runs circles around *Word Perfect 5.1* in terms of text manipulation and reformatting, graphic capabilities, font manipulation, output quality and ease of use (and yes, I have seen *Ami Pro* crashing in a most spectacular way, too!).

Still, if you need two-way file compatibility between your ST and PC, you will have to get the earlier version. Just a month ago, I saw it on a blow-out sale for less than $40. As I already mentioned a few months ago, Version 2 includes *Typografica*, a bitmap font generator, capable of producing fonts usable by *Publisher 2 ST* (at least in sizes up to 14 or 16 points). This useful program is not included (or useful) with Version 3.

Back to *Publisher 2 ST*

In order to make the best use of *Publisher 2 ST*, especially with a user-extended font set, we should understand the correspondence between what you see on the screen and what you get on the printer.

This is simple, you might say, what you see is what you get, this is what WYSIWYG stands for, right? Wrong, or at least not quite right. First of all, screen and printer are different devices, with a different number of dots per unit of length; whatever you see on the screen may, at best, only approximate the printed output.

Tweaking Fonts for Better Screen Preview

With bit-mapped fonts the situation gets somewhat more complicated. The fonts actually used for printing are, as a matter of fact, different than those used for screen display. Obviously, in a well-configured font setup both font versions should resemble each other, but the similarity will never be ideal. It should, however be close: for example, a font for the HP Laser (at 300 dots per inch) may have a letter M designed on a 70x80 pixel grid, while an equivalent font in the same point size, designed to work with the monochrome (90 dpi) monitor should use a grid of 21x24 pixels or near this size. (Note that 70*(90/300) is 21 etc.)

If, like in the example above, the proportions and relative sizes of letters in the screen fonts are similar to those in the printer fonts, then the screen image of your page will be fairly close to the final output. What will happen, however, if this is not the case?

Publisher 2 ST (and most of other programs using fonts stored in bitmapped form) will always use the *printer fonts* for any calculations of how to place characters on the page. This means that the font width (.WID) file will be used to determine not only where the characters will be printed, but also where they will be displayed on the screen. Now, mind you, while the positions of characters on the screen will be computed based on the print font, the characters displayed there will be taken from the screen font!

This is a perfectly reasonable solution within the limitations imposed by the bitmapped font approach. It will result in proper printouts, but the screen preview may look either too crowded or too spaced, or worse.

For example, if your screen fonts have 20% wider aspect ratio than the printer fonts (with the M from our example above being, say, 25 pixels wide instead of 21), characters on the screen may blend together or even overlap.

This may easily happen if you are building your own font set, taking screen and printer fonts from different sources. In such cases, try matching the next smaller point size of the screen font with a given printer font; this should improve the preview quality.

To do it, just rename the screen font file appropriately, and then use a font editor (like *Fontz!* or *FED* mentioned last month) to modify the *nominal point size* of the font file. (This involves no changes to the actual font patterns: just run the font editor, read in the font file, go to the proper menu, enter the new nominal size, save font; all done in 20 seconds or so.)

Using a matched pair of screen/printer fonts is, of course, the easiest way, as the font supplier usually takes care that the two match properly. But even if this is not the case, you are not left helpless, as long as you understand the rules of the game.

Using Fonts Designed for a Different Device

A bitmap is a bitmap is a bitmap. This means that, say, a 20-point font designed for a 180 dpi (dots per inch) Epson LQ printer will be the same as a 40-point font for the monochrome screen (90 dpi), or as a 12-point font for the HP Laser at 300 dpi.

What these three devices have in common, is the one-to-one aspect ratio, i.e. the same number of pixels per inch vertically and horizontally.

The only difference between these three font files will be not in the actual pixel data, but in the nominal font size, just a single numeric value embedded in the font file and easy to change as described above.

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- MegaPaint Professional
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- and the list goes on and

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This means that if you find a nice GDOS font in a number of point sizes for the HP Laser, you can easily convert it to a set of larger (by a factor of 300/180 or 5/3) sizes for your Panasonic KX-P1124 (compatible with Epson LQ). All it takes is renaming some files (just to follow a convention lest you get lost) and changing the nominal point size. The smaller of the HP fonts can even be used as the largest of screen fonts, while smaller screen sizes can be generated by mechanical rescaling (*Fontz!* and some other programs have this capability). The quality of such rescaling is nothing to write home about, but these fonts will be used only for previewing, so the printout quality will not suffer.

If you are using a 24-pin printer (LQ or other), the chances are that your *Publisher* disk already has some useful fonts in larger sizes than those chosen for you by the fascist installation program. Try installing the *Publisher* again (to a different directory on your hard drive) and tell it you have an HP LaserJet printer. List both directories (new and old) in alphabetical order. Compare files for the same font face (see my previous column on the *Publisher* naming convention). You will easily spot the crypto-twins (differing only in the nominal point size), because the file size in bytes will be the same. Then you will see some HP files without equivalents in the LQ directory. Voila! (or, as one of my fellow authors here uses to say, Viola!) You've got yourself some of those extra-large babies for your LQ! Just, let me say it again, rename the files properly and then calculate and change the nominal point sizes for your printer or screen. (Do not forget to modify your .SYS file, re-install GDOS and re-run FONTWID.APP as described last month.)

And what if you are using a medium resolution monitor? It has an aspect ratio of about two-to-one, so adapting fonts from other devices (with one-to-one ratio, that is) will not work. This will not affect the printer font set, but in order to get larger screen fonts, just rescale the largest ones you have in the same face, or do nothing and watch what happens--you may be pleasantly surprised. In the worst case, your screen preview will use doubling of the existing sizes, somewhat jagged, but what the heck, this is just a preview. Besides, doing DTP in medium resolution wasn't the brightest of your ideas to start with.

Do Not Listen to Idle Gossip

Our topic is far from being exhausted and I am planning to return to it occasionally. Yes, I understand that in a few weeks (months? years? centuries?) we will have the new, scalable *Speedo-GDOS* from Atari, with zillions of well-behaved applications taking full advantage of its features, and only orangutans will still be using the old, bitmapped fonts. This is, however, going to be one heckuva crowded jungle!

In the meantime, use your common sense when reading what people write about GDOS and *Publisher*, and do not accept anything printed (even on glossy paper) as necessarily true. For example, disregard the information from the latest *Atari Explorer*, that your ASSIGN.SYS file has to be limited to the fonts that "originally came with the program" because their names "are part of the program's menu." Peeeeple, pleeez! Read my column from time to time (or, for that matter, anything else)!

Gemulator - and Very Much So!

Darek Mihocka is, for all we know, one stubborn guy. You can agree or disagree with him on this or that subject, but you cannot ignore him. In his *Gemulator 1.0*, he demonstrated that ST emulation can be done on a PC-DOS machine, while in the current Version 2.1 he clearly shows that it can be done right.

I have been using the latest (?) Version 2.10b for a month now on a 486/50MHz/8MB clone in my office, having nary a complaint to file. The hard drive access (both read and write) works flawlessly, my SVGA screen looks great in ST monochrome (works fine in color, too), mouse action is smooth and precise, and the HP Laser printouts come out just fine. Most importantly, all ST programs and desktop accessories I've tried so far work without problems.

Looks like *Gemulator* is reaching maturity; give me a month more of using it and I will be ready with a user report for the April issue (I've got to find *something* to complain about!), including tips on how to set it up in a convenient way.

In the meantime, if, not being sure how the bloody thing would work, you were postponing the purchase the *Gemulator* ROM board and software for your sad, sad PC clone at work (you are not using one of *those* at home, are you?), wait no longer: it is here, it works, and it will make your life less miserable. So far, I am most impressed.

The Onslaught of Mad Mac

The official Atari line is as it has always been: this time we *really* mean business, yes sir! Well, I hope the Falcon will fly, because it will have to fly high to get any non-negligible share of the market.

I do not mean the competition from cheap 386 clones, or from all those 486 machines wasting all this power just to push *Windows 3.1* through the bottleneck of DOS. In case you have not noticed, Apple is now selling strong their MacIntosh line in a very smart campaign, directed much below their traditional market.

In a recent *Washington Post* I found, among others, an ad for a MacIntosh Performa 200 below $900, plug-and-go complete with an 80 MB hard drive. And for the color-capable LCII under $800 with 40 MB of HD storage (here you have to add $400 or so for the color monitor). Both machines run a 68030 at 16 MHz, which gives

them, for most practical purposes, performance of a PC-DOS clone at twice this clock rate (try scrolling through a large *Word Perfect* document and you will know what I mean).

Other, more powerful, models are priced every $400 or so, and you have to be a masochist to buy anything with Intel inside (most people are, and this will puzzle me forever).

As I see it, this may pose a serious problem for Atari. Let me quote what I consider good prices in suburban Maryland. A 4MB STe can be bought for $500 (add $60 or so for TOS 2.06), and this is with a 720k floppy drive (as opposed to 1.4M, another $170 extra). Add a monochrome ($180) or color ($290) monitor and an inexpensive 50M hard drive ($330) and you will start wondering what happened to the power without price...

Take note: with the color STe you still get medium resolution only, and the machine itself runs a 68000 processor at 8MHz, although the Atari mono monitor is better than the nine-inch one built into the Performa. Of course, you may go for a 16MHz Mega STe (if you can find one) but then, again, the price goes up again, and things do not change much.

The bottom line is simple: in order to develop (as opposed to cloning) and sell a nice computer at a highly competitive price, you have to sell *lots* of them. You don't have to be a rocket scientist to figure this out.

Sadly enough, the Mac pricing will also probably hurt the sales of *Spectre GCR* ($200, but with the required original Apple ROMs it will cost you $400 or so), although *Spectre* still remains a good alternative for people who are running TTs (all ten of them, as of the last count).

Now, here (hopefully, as you are reading this) comes Falcon, offering, at long, long last, a 68030 processor running at a respectable 16MHz. Thanks to the DSP chip it may, indeed, open new horizons in low-cost and high-performance sound and graphics processing. It will also accept low-priced peripherals from the PC market, and match the VGA display quality. But, from the viewpoint of those of us who are using their machines for productivity applications, how will Falcon withstand the onslaught of the Mad Mac?

How will I persuade a computer-shopping friend, who just wants a general-purpose productivity machine and who does not care about genlock capabilities or about direct-to-disk sound mastering, and who just wants a civilized computer to do everyday things with well-behaved and easy-to-use software? This won't be easy.

I am a computer hobbyist and a hardcore Atari enthusiast. The advent of cheap PC clones, attracting mostly the me-too crowd of buyers who just didn't know any better, did not bother or scare me at all. The low-priced Mac does.

PC clones emulating ST's!

"Calamus on IBM? Yes... it will knock your socks off" - AtariUser 11/92

Gemulator version 2.1 does it...

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o Efficient	up to 4 TOS versions on same board run mono/color on one monitor
o Feature-packed	set ST memory from 512K to 8MB hard drive reading **and** writing VGA graphics support (TT medium resolution)
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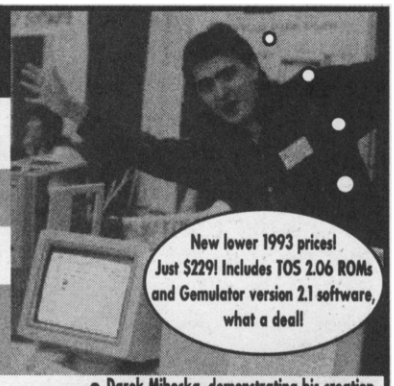

• Darek Mihocka, demonstrating his creation, Gemulator, which runs on 386/486 PC clones.

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Shadowlands

Highly Lethal With an Awkward Task-Intensive Interface

Review by Alfred C. Giovetti

A dream comes to Nancock, one of the members of the fellowship of adventurers duly chartered by the Lord of Aquanor, capital of the Harbor Lands. The dream tells of the ruthless slaughter of the lands of Koranos, its people, and its ruler Vashnar, by the evil Overlord's unspeakably evil horde army. The adventurers are compelled by the dream, delivered by the unresting spirits of Vashnar's dead, who live in anguish over the brutal death of their friends, and families. In return for the promise of untold wealth, the four adventurers--a priest, a fighter, a mage, and a thief--venture into the Shadowlands to avenge Vashnar, and restore him to life on the altar of regeneration deep within the Overlord's Temple.

Shadowlands starts in the same manner as most role playing games with the evil "bad guy," hordes of monsters, and worlds to save. Character creation randomly assigns each character numerical values, shown by bar graphs, for the four basic statistics of combat, "magik," strength, and health. Characters can be rerolled by selecting "chance card" until the attributes are satisfactory. Other statistics used in the game are armor level, food, water, and force. Characters can be personalized with names and their appearance can be changed by using graphic icons for hair, eyes, nose, and mouth. A pre-rolled group can be selected for quick start.

The game is fully mouse-controlled and icon-activated, using a separate additional character portrait icon (not the character graphic) of head, hands and legs to control the actions. The head is for eating and reading. The action, or left, hand is for using an object. The transit, or right, hand is for collecting, dropping, throwing, or operating. The walk, or left, leg is for walking one character only. The lead, or right, leg is for walking the group around in preset formations, but it only works when all characters are on the screen at one time. The player manual warns that right and left are from your perspective and not that of the character icons.

The keyboard equivalents for most commands are hard to use, and many objects are hard to select even with the mouse, since the game was designed for very precise pointing at very small area pixel elements. Game play is tedious and non-intuitive, but the player manual gives 23 pages of detailed instructions for each game action. Players are well advised to read and understand the manual before playing the game, especially the areas on lighting and extinguishing torches needed to conserve light. Simple game actions may require many steps that become tedious after playing the game for a long period of time. Dropping or throwing requires five operations: select character portrait, place item in action hand, select the item, select transit hand, target or select location to throw or drop.

Characters require both food and water to survive. Eating and drinking are not automatic functions. Characters can starve to death while carrying around large stores of food or standing right next to a water fountain. Weapons must be manually re-equipped into the action hand after using the action hand to perform other functions. Targeting small items can be very difficult. Your character may be killed by a mouse before you can target him.

The icon system allows all the characters to act individually, and combat is in real time with weapons and spells. Most of the problems of real-time combat with multiple characters are seen. There is no Paragon-like "PAL system," where all the characters, other than the player's alter ego, act independently in combat. Most players find real-time combat with individually controlled multiple characters far too difficult to coordinate. In a critical battle, your characters may be killed before you can issue all the needed orders.

Individually controlled characters give you the freedom to have multiple quests, where the characters split up to complete separate quests. Some puzzles in the game require the group to act alone to solve them. Other puzzles, require the characters to act in two teams of two characters each. Physical puzzles require the use of items or characters as counterweights or objects thrown at teleporters to activate counterweights somewhere else in the maze. Tactical combat is possible with individually controlled characters, but it is not possible where only the leader is controlled by the game player. But where tactical combat is a feature of the game, most players prefer rounded combat, not real-time combat.

Many actions that are automatically controlled in other games are manually controlled in *Shadowlands*. You cannot just select the key from your inventory and click on the lock keyhole, you must first move the key to your action hand, and select the lock. The game has no autocombat or automapping function, and the overhead, oblique, "isometric 3D" display without a coordinate system, is sufficiently disorienting to make manual mapping somewhat difficult. The display superficially resembles *Darklands*, but the controls are more difficult to use than *Darklands*, which uses rounded combat. Individual or team character movement can be very awk-

ward, since the characters have no "routing system" for avoiding obstacles, on which they can get stuck for a frustrating period of mouse-pushing redirection. The character inventory window is activated by right-button clicking on the character portrait. Each inventory item is graphically displayed in the 16 available slots of the upper right-hand display's backpack section. Items in the action hand are displayed in the upper central display, where chests, which increase character carrying capacity, can be opened and the contents of up to six additional items can be displayed. Numerical and bar graph statistics are displayed below the items in hand. Sleep, eat, save, and load function icons are below the statistics display. Items have an existence of their own and remain where they are dropped. But the authors elected not to have paper doll-like equipping or automatic equipping functions.

The magic system is unique. Points of magical power must be drained from objects; they cannot recharge and will lose effectiveness, in expending the magic power needed to cast spells. Magic scrolls and spell books can be used to cast the spells by clicking on them, while held by the action hand, and upon the adversaries. Selecting spells does not suspend time, so up to six of the most effective offensive spells must be prepared in advance, by placing them in the desired order of casting in the spell books. When the book is selected, and the target is selected, the spells will be cast one at a time.

The *Shadowlands* game system has some very new, innovative ideas, such as the "photoscape" real-time system for lighting areas of the game with realistic shading, which obscures darkened objects, and has certain monsters who are attracted or repelled by light and darkness. The bestiary is an interesting group of evil creatures, such as skeletons, minotaurs, rats, scorpions, snakes, hell hounds, annubi, valkyrie, and undead. The physical puzzles challenge dexterity and intelligence. But the game may prove too demanding and not in time with many game players' tastes, with its highly lethal nature (save often), awkward task intensive interface, lack of automatic functions, and the combination of real-time combat with tactical character controls.

[Developed by Domark (European), U.S. phone: 1-415-8929. Designed by Dean Lester. Distributor: Accolade, 5300 Stevens Creek Boulevard, San Jose, CA 95129, tel: 1-408-985-1700, fax: 1-408-246-0885. Systems: IBM (1-+ MHz AT class or better), Amiga, Atari ST (imported). Requires: 640K. Mouse highly recommended. Suggested Retail Price: $49.95.]

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GOOD NEWS AND BAD NEWS

Atari Industry News and Announcements

SAC Expo: March 13-14

The Sacramento Atari Computer Exposition, sponsored by the Sacramento Atari ST Users Group (SST), will be held at the Towe Ford Museum in Sacramento, California on March 13-14, 1993. A major two day effort, the SAC show is being held in the special events area of the Towe Ford Museum, home of the world's most complete antique Ford automobile collection. As an added bonus, admission to the museum is free when you attend the Expo. The museum is located at the intersection of Interstates 5 and 80, just 15 minutes from the Sacramento Metropolitan Airport. Contact Nick Langdon (Vendor Coordinator) C/O SST, P.O. Box 214892, Sacramento, CA 95821-0892, phone 916-723-6425, GEnie: M.WARNER8, ST-Keep BBS (SST) 916-729-2968.

Toad to Market Silhouette Colortrace

Severna Park, MD – Toad Computers is proud to announce that it has acquired the exclusive worldwide distribution and marketing rights to *Silhouette*. The newest version of *Silhouette*, version 1.5, supports color and adds many new features and also sports a new name: *Silhouette Colortrace*.

Silhouette has always been an exciting vector and bitmap graphics package with many unique and advanced graphics tools. *Silhouette Colortrace* adds color to the mix and allows you to create colorful vector and bitmap graphics from scratch. Or you can edit existing color graphics! *Silhouette Colortrace* outputs to standard black and white and color file formats like Illustrator EPS (for use with *PageStream*), GEM metafiles, and even *Calamus* CVG.

For viewing color work on-screen, *Silhouette Colortrace* supports TT medium resolution (16 colors) and the Falcon 16 and 256 color modes. Color work may be done in other modes as well, including monochrome 640x400 or 1280x960.

Silhouette Colortrace includes a new and upgraded bitmap to vector conversion process that supports color and has reduced memory requirements. The program also takes advantage of *Speedo GDOS* and its Bitstream fonts for inclusion of standard GDOS text. Additionally, *Speedo GDOS* text may be converted into modifiable vector objects—a great feature for creating custom logos and other text effects.

Silhouette is developed by Maxwell CPU of Odenton, MD who will continue to add new and exciting features to the program. Toad will provide technical support and upgrade assistance to users and will also market the product aggressively in the U.S., Canada, and Europe.

Registered owners of version 1.25 or greater can upgrade to *Silhouette Colortrace* for only $15.00 (plus $3 shipping) until April 20, 1993. Thereafter, the upgrade cost will be $25.00 (plus $3 shipping). To upgrade, please send your check along with your original disk to: Toad Computers, Silhouette Upgrade, 570-F Ritchie Highway, Severna Park, MD 21146.

The suggested retail price of *Silhouette Colortrace* is $119.95. In comparison to similar programs on the Atari or any other platform, *Silhouette Colortrace* offers twice the features at half the price. *Silhouette Colortrace* will be available for a limited time from Toad Computers for $99.95 (includes shipping). *Silhouette Colortrace* will begin shipping in the next four to five weeks.

For upgrade information, technical support, or to order a copy of *Silhouette Colortrace*, contact: Toad Computers, 570-F Ritchie Highway, Severna Park, MD 21146.

Technical Support / Upgrades (410) 544-6943 Voice, (410) 544-1329 FAX, (410) 544-6999 BBS. Orders ONLY: (800) 448-TOAD. No technical support will be given on the 800 line.

STraight FAX / Silouette BBS Support

Severna Park, MD – A new computer bulletin board has been set up by Toad Computers specifically for owners of *STraight FAX* and *Silhouette*. Registered owners of either program may call to download upgrades, related programs and text files.

Users may also call to ask technical questions about either program. The developers of both programs (Charles Smeton of NewSTar Technology Management for *STraight FAX* and Tim Reyes of Maxwell CPU for *Silhouette*) will be online, answering users' questions.

If you are a registered owner of *STraight FAX* and would like to upgrade to version 1.07, you can either send $2 along with your original disk to Toad Computers, or you can call the new BBS and download the upgrade for free. Just leave a message to the sysop requesting the upgrade.

If you are a registered owner of *Silhouette* and you would like to upgrade to version 1.5, *Silhouette Colortrace*, you can either send $15 (plus $3 shipping) along with your original disk to Toad Computers, or you can call the new BBS and download the upgrade for just $15. Leave a message to the sysop with a Visa, Mastercard or Discover card number and expiration date, and request the upgrade. (After April 20, the price of the upgrade will go up to $25).

Alternatively, upgrades to either program can be handled through GEnie or Compuserve. Leave mail to TOAD-SERV. on GEnie or 72470,1605 on CompuServe.

The number of the Toad Computers Support BBS is (410) 544-6999. It operates from 300 to 14,400 baud, eight bits, no parity, two stop bits, 24 hours per day. Questions regarding the BBS can be directed via FAX to (410) 544-1329, or by voice to (410) 544-6943 (after 6 p.m. EST).

Gemulator, Version 2.1 Released

Branch Always Software has just released version 2.1 of the *Gemulator*, the Atari ST emulator for DOS and Windows

compatible PCs. *Gemulator* allows a 386 or 486 based PC to directly run most Atari ST software (except for games and music software) and supports all versions of TOS, four different screen resolutions, and can provide up to eight megabytes of RAM to ST programs.

Gemulator 2.1 is available now from computer dealers in Europe and North America. In the U.S. and Canada, the list price is only $229 U.S. which includes the Gemulator board, emulation software, and U.S. TOS 2.06 ROMs. *Gemulator 2.1* versions available in the U.K., France, Holland, and Germany contain TOS 2.06 ROMs appropriate for each country, and all documentation and software has been fully translated.

Gemulator 2.1 will be shown at the upcoming Sacramento Atari Expo on March 13th and 14th in Sacramento, California. Come by the Branch Always Software booth and see Gemulator for yourself!

Ver 2.1 has the following new features and improvements:

- The separate 386 and 486 versions of *Gemulator* have been combined into one single convenient version which is just as fast (or even slightly faster on some machines) than *Gemulator 2.0*.
- The ability to create a virtual Atari hard disk partition on any size DOS partition; you can now safely read and write Atari files anywhere on your PC's hard disk and even over the network, without having to reformat or repartition the hard disk as before.
- A 4 MB PC can now emulate a full megabyte of ST RAM (up from 512K before). *Gemulator* can emulate up to 8 MB of ST RAM, double the 4 MB limit of the real Atari ST.
- *Pagestream* and some other programs now print up to 10 times faster. The actual speedup will depend on the size and contents of the *Pagestream* document. A full page 8.5" x 11" 300 dpi *Pagestream* document prints out in about 3 minutes on an HP LaserJet printer.
- The real-time clock in the ST keyboard is now emulated. This allows TOS 2.06 to boot up with the current DOS time and date.
- The "missing keystrokes" bug from *Gemulator 2.0* and other bugs are fixed.

Gemulator has several features not found in the real Atari ST, and in many ways it is better than a real ST:

- The ability to emulate up to 8 MB of ST RAM (described above) makes it ideal when using a lot of GDOS fonts, running the new MultiTOS, or editing very large Calamus and Pagestream documents.
- The ability to emulate TT medium resolution (640x480 16 colors) allows most GEM-based Atari ST programs to run with more colors and with better graphics than is possible on the real ST.
- Switching from color to monochrome (or vice versa) is as simple as pressing one key. Forget having to use two monitors and swapping cables all the time!

NEW!

Silhouette Colortrace

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- Color or Monochrome bit-image auto-tracing with upgraded features and reduced memory requirements. Automatically converts bitmap graphics into smooth black and white or color vector graphics!
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IMPORT: *Color IMG, Degas, MacPaint, TINY, GEM, Calamus CVG, GIF, and Silhouette SGF files.*

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- Supports TT Medium and Falcon 16/256 Color Graphics Modes – Even Overscan Modes!
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- Supports printing through GDOS

***Silhouette Colortrace** is marketed exclusively by Toad Computers for Maxwell CPU. All technical support and upgrade questions should be directed to Toad Computers. Call our new STraight FAX / Silhouette support BBS: (410) 544-6999! Get the latest news on all quality Toad products!*

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Registered Silhouette Owners: **To upgrade to *Silhouette Colortrace* from Silhouette version 1.25 or greater, send $15 (plus $3 shipping) along with your master disk. After April 20, 1993, send $25 (plus $3 shipping). Upgrade now and save $10!**

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✓ Each Gemulator board can hold up to 4 sets of TOS ROMs and you can easily switch from one version of TOS to another by just pressing a few keys. This allows you to use the supplied TOS 2.06 with most of your ST software, but switch back to TOS 1.0 or TOS 1.4 for running earlier software not compatible with TOS 2.06.

✓ Due to the ever increasing speed of PCs and the availability of the 486 DX2 clock doubler chip, you can easily upgrade your 33 Mhz 486 PC to a 66 Mhz PC and run Atari ST software up to 3 times faster than a real ST. That's faster than a Mega STe, faster than a 20 Mhz accelerator, and in many cases, as fast as the Falcon.

Gemulator now has smaller hardware requirements. Your PC need only have the following: a 386 or 486 CPU, 4 MB of RAM, a 720K 3.5" floppy disk drive, a VGA card and monitor, 1.7 MB of hard disk space. A mouse is optional, but recommended.

Gemulator consists of a PC board, which plugs into any 8-bit or 16-bit AT-style slot. The board is used to install TOS ROMs, which are needed to run Atari ST software on a PC. The emulator itself is simply copied to the hard disk and run from the DOS prompt or a DOS window just like any other PC program.

The speed of *Gemulator's* emulation is affected by the speed of your PC's processor, hard disk, video card, and other factors, but it is usually proportional to the speed of the processor (the 386 or 486 chip). Below is a table of various processors and the *approximate* speed of emulation compared to a standard ST (which of course has a relative speed of 1.0):

386/16	– 0.3	486/25	– 0.9
386/33	– 0.6	486/33	– 1.2
386/40	– 0.8	486/50	– 1.8
		486/66	– 2.4

386 based computers running slower than 33 Mhz are not recommended for use with *Gemulator* due to the relatively slow speed of emulation. *Gemulator* emulates the 68000 chip entirely in software and so a fast 386 is required.

The Gemulator package comes with a set of TOS 2.06 ROMs, but if you wish to use your own ROMs, the board and emulator can now be purchased without any TOS ROMs for $179, a $50 savings. You must, of course, supply your own TOS 1.0, 1.2, 1.4, 1.6 or 2.06 ROMs before being able to use Gemulator.

In the U.S. and Canada, Gemulator is distributed by: PMC (Purple Mountain Computers), 15600 N.E. 8th Street, Unit #A3-412, Bellevue, WA 98008. For ordering information, call 1-206-399-8700.

In Europe (including the U.K. and Germany), Gemulator is distributed by: ACN / Atari ST Nieuws, Postbus 5011, 2000 CA Haarlem, The Netherlands. For ordering information, phone 011-31-23-351100, or fax 011-31-23-351444.

To upgrade from Gemulator 1.0 to Gemulator 2.1, send $49.95 is U.S. funds and your Gemulator registration card directly to us: Branch Always Software, 14150 N.E. 20th Street, Suite 302, Bellevue, WA 98007.

Users who last year upgraded to Gemulator 2.0 have already been sent a free Gemulator 2.1 upgrade disk. If you upgraded to 2.0 but haven't received the 2.1 disk, contact us to make sure we have your latest mailing address.

New KERMIT Communications Software for ST

New York, NY – Columbia University is pleased to announce the release of *C-Kermit 5A(188)* communications software for the Atari ST with GEMDOS, the Atari ST with MINIX/68K, as well as for many other computers and operating systems including most modern UNIX variations, DEC VMS, IBM OS/2, MicroWare OS-9, and the Commodore Amiga. *C-Kermit 5A* offers:

* Asynchronous serial connections
* Terminal connection
* Efficient error-free file transfer

The Kermit file transfer protocol transfers text or binary files singly or in groups with full error detection and correction over 8-bit or 7-bit connections. Since the previous release, 4E(072) in 1989, *C-Kermit's* file transfer efficiency has been dramatically improved by the addition of sliding windows (up to 31 window slots) and long packets (up to 9024 bytes).

The advanced Kermit protocol features of *C-Kermit 5A* can be used to full advantage in conjunction with MS-DOS Kermit on PCs with DOS or Windows, IBM Mainframe Kermit-370 for VM/CMS, MVS/TSO, or CICS, and, of course, with another copy of *C-Kermit 5A* itself on GEMDOS, MINIX, UNIX, VMS, OS/2, AOS/VS, or any of the other operating systems where *C-Kermit* runs.

C-Kermit is easy to use, friendly and nonthreatening, helpful to the novice without getting in the way of the expert, and it is consistent throughout a wide range of operating systems and platforms. The GEMDOS and MINIX/68K versions of *C-Kermit* include key mapping and keystroke macros during terminal connection, execution of command and initialization files, and a wide selection of communication and protocol settings.

C-Kermit 5A comes with the new Digital Press book, **Using C-Kermit**, by Frank da Cruz and Christine M. Gianone, which is geared towards both the novice and the expert, and includes tutorials, numerous illustrations, tables, and examples, as well as easy-to-use and comprehensive reference features.

C-Kermit software is available now. It is distributed in C-language source code form (and, for GEMDOS, also in binary executable form) by Columbia University for a modest distribution fee. *C-Kermit* for the Atari ST, on 3.5" 720K disks, including the binary executable program plus all relevant installation, initialization, demo, help, and beware files, and the book **Using C-Kermit** is available for $45 (US, Canada, and Mexico). For a Kermit software catalog, including ordering information, write to: Kermit Distribution, Columbia University, 612 W. 115th Street, New York, NY 10025. International and credit card orders are accepted.

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Send your Atari–related press releases to CN News, 122 N Johnson Rd, Sterling, VA 20164. GEnie: JOE.WATERS; CIS: 74005,1270.

CN Library
New Disks for March

#783D: Startrek

Star Trek: The Klingon War. Control the USS Enterprise against a Klingon invasion fleet. Strategy and conservation of resources is a must. Digitized voices, effects and animation. 1 MB, DS drive or HD required. (C)

#784D: Nethack V3.1

This is the largest unix-based role playing dungeon game ever created. Requires more than 1MB. Runs on ST, STe, and TT. (File is a compressed ZIP file; expands to 1.5MB when uncompressed.)

#785D: GAMES

TUZZLE V2.1 –Computerized version of the handheld puzzles you played as a child; features digitized sound samples on the STe/TT machines.

SPACEWAR–Space War for 2 players using 2 joysticks. Includes customizing; innovative graphics. Not in TT mode.(C)

CENTPED–The best version of Centipede you've ever seen. Shareware(C)

PUNKMAN–One-player game involves you controlling a long-haired "pacman" around a maze, eating what you can and avoiding the four ghosts.

#786D: Games

EVADER–A fast action shoot-em-up game. 1 MB, Joystick required. Exceptional game!(C)

MYSTIC–Freeware Dungeon Master type RPG with decent 3D dungeon graphics and good game play. Lots of critters to fight and traps to negotiate.

PSYCHO WORLDS–Fast arcade action, wild graphics, blast the psychos. 3 separate worlds w/4 games in each. Design more with the construction set.

VEGAS_BJ–A blackjack game using typical rules. Great for practicing before using real money in a casino.(C)

#787D: K&R C Compiler

K & R (ie, non-ANSI) C compiler for the ST. Disk contains a complete development system and GemFast v1.8 GEM programming library. The compiler is based on the Sozobon compiler, but contains many modifications, bug fixes, and extensions. The compiler features an automatic installation process.

#788D: SOUND LAB

V1.03 of DMJ-Soft's Sound Lab sample editor. You can edit most any type of sample, and record with your ST Replay or Paandal cartridge.

#789D: PAULA

Paula V2.0d is the latest version of this excellent ACC/PRG .MOD player for the STe! Also included is Petra, a TSR that allows regular STs to use Paula! (Petra will only work on TOS 1.4 and higher machines!) Disk includes and 4 MOD files: BRDWATCH, DEADJIM, DEELITE, and DRAGON.

#790D CALLIGRAPHER 3 DEMO

A complete working mono version demo of Calligrapher 3, the next generation of the ultimate writing machine from CodeHead and Working Title. Demo includes a thorough walk-through of all features plus a listing of new features and upgrade procedure.(M)

#791D: WRITING APPLICATIONS

7-UP–Feature-packed word processor from Germany. Multiple documents, supports (but doesn't require) GDOS, GEM Clipboard, text preview, and much more. Shareware. Program and all docs in German. TT Compatible.

MDATE_25–This is a *BETA* shareware release of Make*A*Date V2.5, a Personal Information Manager (PIM) that sports a Scheduler, Phone Book, ToDO List, Notes featuring File Attachments, dBASE file viewer, Phone Dialer and more.

TLCBOOK3–A combination address book and date keeper. Ver 3 now prints phone books, mailing labels, date books, and date labels. It allows as many entries as your system's memory will hold and has full Hot Key access. Also new is the ability to merge multiple address books and you can even print addresses, dates, labels to disk! Supports any printer. Works in ST resolutions (except low).

#792D: GRAPHIC APPLICATIONS

IMGVIEWR–An .IMG file viewer that will show bitmapped (monoplane) .IMG's in its four windows, and also show multi-plane (i.e. color) .IMG files.

JCVUE23–JCView, a monochrome-only program, will edit (and view) many different types of picture files. Numerous features. An excellent freeware program by John Charles. (M)

PCHROME3–PhotoChrome 3.0 by Douglas Little/Pixel Twins Shareware Utilities is a color picture file conversion utility that allows conversion of TARGA, GIF, RAW, and IFF file formats to the new PCS format. The PCS format allows for 32000+ color palette. PhotoChrome 3.00 now allows for direct importation of GIF files. Many features. Outstanding quality color conversions.

S_DRAW–This is version 2.0 of Smooth Draw, with lots of great new features, squashed bugs, and cleaned up code. Has all the features of Degas Elite and more! Loads and saves lots of file formats, printing to EPSON compatible, clipping for programmers, sprite and mouse editor for programmers, and exact entry by pixel coordinate of most functions. Magnify, flip the picture, grab blocks for copying, move, flipping or saving and more.

#793D: MISC APPLICATIONS

JCCAL30–A calendar generating program that prints calendars for any month(s) or year. Include pictures for each month, set the text styles, box styles, and more. Built-in drives for DeskJet and dot matrix printers. (M)

JCLABL18–JCLabel by John Charles features mailing list handling and will print mailing labels and more mailing labels.(M)

MORSEGEN–V1.3, by Joseph Schachner, reads a file of text from disk and produces morse code using the Atari ST's built in sound capability. Code produced at speeds ranging from 3–30 words/minute.

SMOUSE1B–Latest version of the CyReL Serial Mouse Manager. Contains new information about compatibility with the latest developments in pointing devices, like radio controlled mice, trackballs, and pen-mice. Redraw bug has been fixed.

#794D: UTILITIES

APPLIER –Enhances the "installed application" feature by allowing you to install up to eight different applications for the same document type (file extension).

AUTOFM12–Slip Auto File Mover in your AUTO folder (or run from the desktop) and automatically copy/move/delete files based on age or size. New version has special 'kill' mode added for Maxifile3 users.

BLITZ145–Update to version 1.44 of this hard drive defragmenter and optimizer includes updated manual and corrected bugs.

FASDCHK–Wordmark Systems Hard Disk Drive Check Utility: V1.3 performs checks on fixed or hard disk systems.

FATCACHE–v1.0 Fatcache is a hard disk cache to speed up some HD operations. It also incorporates a section to speed up the slow hard disk operation of v1.0 and v1.2 of TOS.

FATSPEED–This is a program to speed up FAT search, a hack to GEM DOS to speed up the search for free clusters on hard disk partitions.

FLCAT_11–The File Catalog is a simple utility that keeps track of the changes in the files of your hard drive (size, archive bit, etc). TT Compatible.

SERFX20–Serial Fix 2.0 is a patch program to correct a couple problems with use of ST/STe/TT Modem 1 port (or the only serial port for older ST's) with high speed modems requiring RTS/CTS operation. Also includes SERPATCH and TOS14FIX; will automatically implement fixes required for your version of TOS. Serial Fix 2.0 is a universal fix and works with TOS versions 1.0 through 2.06 and 3.0 through 3.06.

SORTIE12–Sortie v1.2 will safely sort any directory by name or by date (in ascending or descending order). This is especiallyuseful for people wanting to sort their picture directories, or for sysops wishing to sort their download directories.

STZIP21–STZip ver 2.1 is a program that allows you to compress and decompress files, i.e. to reduce their lengths. STZip uses files that are compatible with PKZip 1.93 on the IBM PC, and the Unix Info-Zip programs Zip 1.9/Unzip 5.2.

TLCFORM3–Runs as an acc or prg and allows formatting disks with many different parameters. 'FAST' format reads and writes faster than disks formatted with skewed sectoring (twisted) and is 100% compatible with all programs. Program senses high density drive (Ajax chip) and even formats 1.44 meg disks with the Fast format (or other options).

#795: GAG PROGRAMS

A collection of "gag" PRGs and ACCs, written by Meinholf Schneider. These were originally written for a German magazine, but are PD. Source code included. (M)

BLACKHOL–Turns trashcan into animated black hole!

DJANGO–Run this, go about your business, and be prepared!

MAGIC–Stars follow your mouse pointer!

PHYSICAL–Gives your mouse pointer gravity!

SNOW–Your screen is slowly hit by a snow blizzard!

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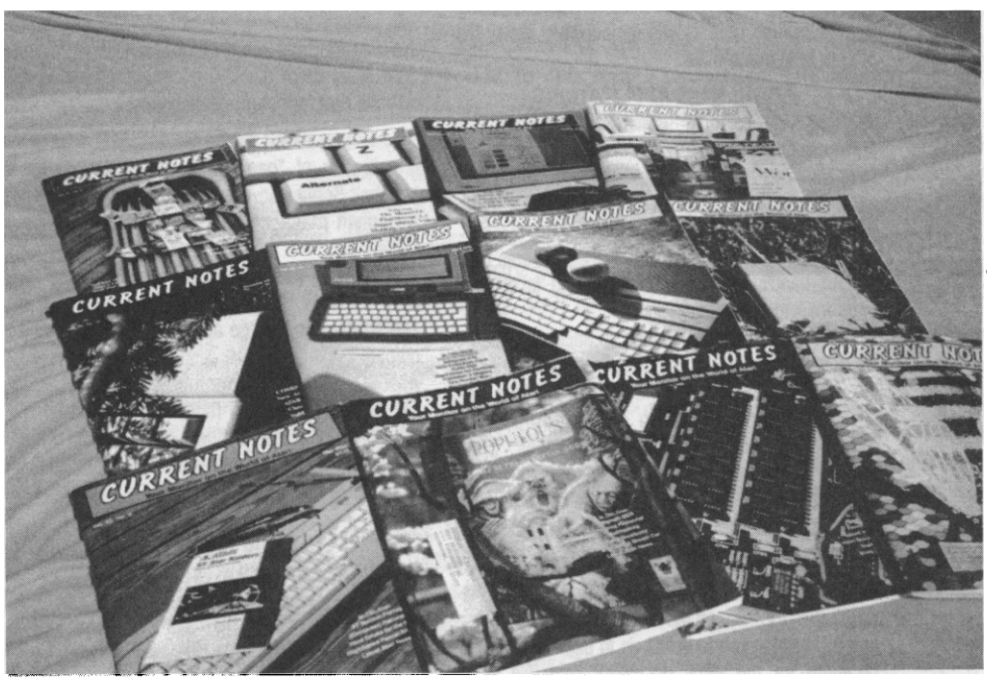

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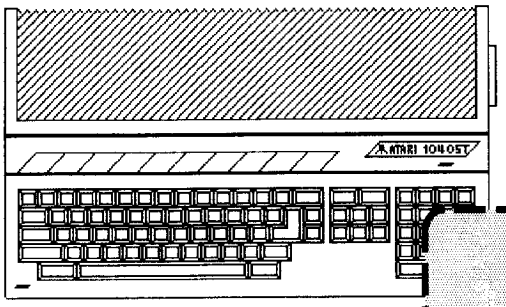

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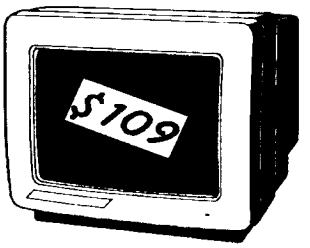

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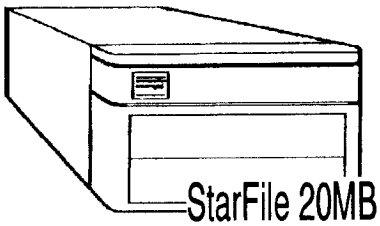

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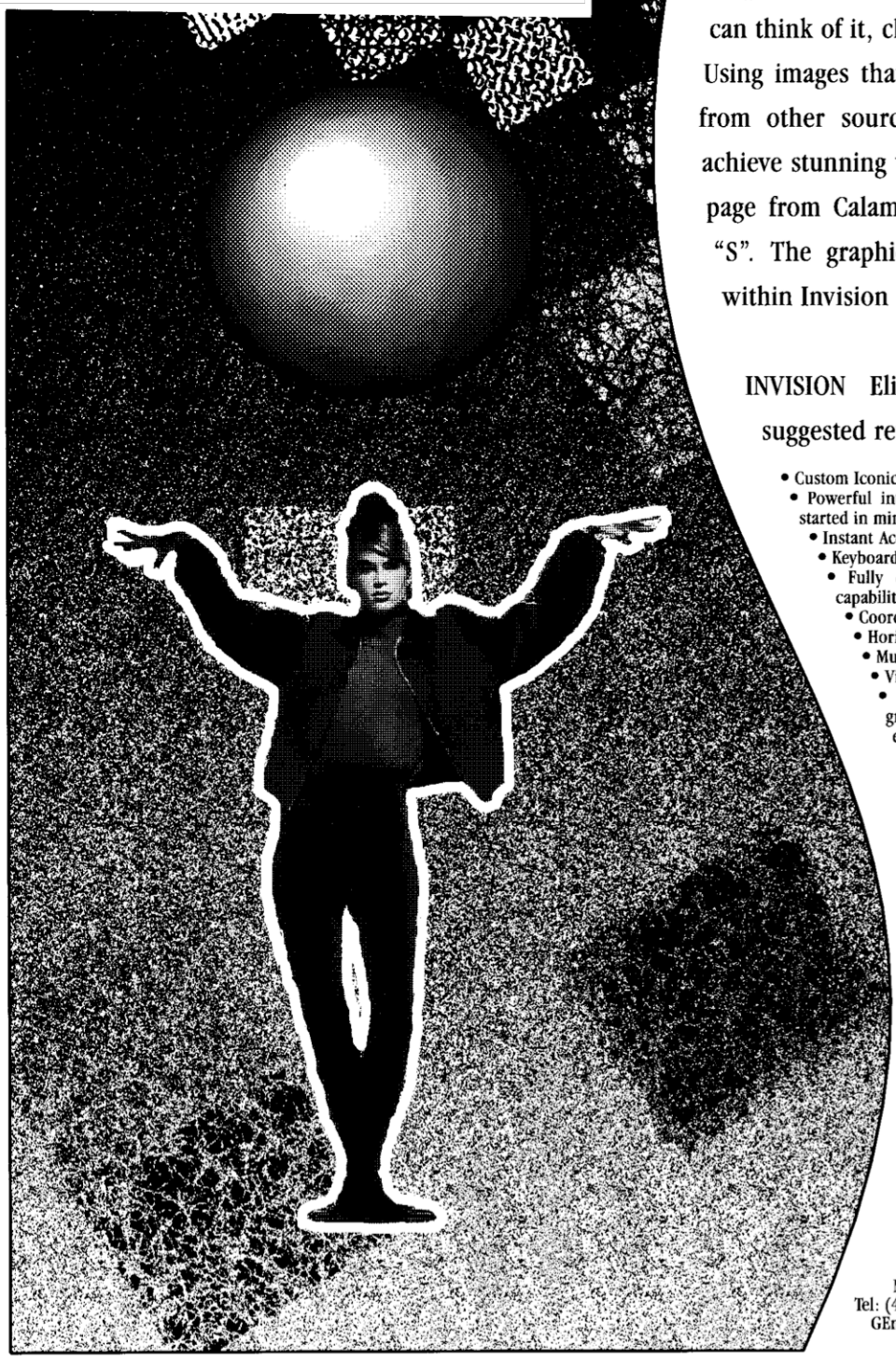

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